NW-HD1

SERVICE MANUAL

Ver 1.1 2004.09

US Model
Canadian Model
AEP Model
UK Model

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SPECIFICATIONS

Maximum recordable number of track (Approx.)*

ATRAC3	ATRAC3plus
5,000 (132 kbps)	2,500 (256 kbps)
6,000 (105 kbps)	10,000 (64 kbps)
10,000 (66 kbps)	13,000 (48 kbps)

* When transferring four-minute tracks

Sampling frequency
44.1 kHz

Audio compression technology
Adaptive Transform Acoustic Coding3 (ATRAC3), Adaptive Transform Acoustic Coding3plus (ATRAC3plus)

Frequency response
20 to 20,000 Hz
(single signal measurement during playback)

Output
🎧 (headphones)/LINE OUT* :
Stereo minijack/194 mV
* The jack is used for both headphones and LINE OUT.

Operating temperature
5 to 35ºC (41 to 95ºF)

Power source
DC IN 6 V (from built-in rechargeable battery)

Battery life (continuous playback)
ATRAC3plus format (48 kbps): Approx. 30 hours

Dimension
Not including projecting parts:
89.0 × 62.1 × 13.8 (the thinnest part 12.6) mm
(3 5/8 × 2 1/2 × 9/16 (the thinnest part 1/2) inches) (w/h/d)
Including projecting parts:
89.2 × 63.4 × 14.3 mm
(3 5/8 × 2 1/2 × 19/32 inches) (w/h/d)

Mass
Approx. 110 g (3.9 oz)

US and foreign patents licensed from Dolby Laboratories.

Supplied accessories
- Headphones (1)
- USB cradle (1)
- Dedicated USB cable (1)
- AC power adaptor (1)
(For the supplied USB cradle)
- Carrying pouch (1)
- CD-ROM (1) *
(SonicStage, PDF of Operating Instructions)
- Quick Start Guide (1)

* Do not play this CD-ROM on an audio CD player.

Design and speci cations are subject to change without notice.

PORTABLE HARD DISK AUDIO PLAYER

9-879-079-02
2004I05-1

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Sony Corporation
Personal Audio Company
Published by Sony Engineering Corporation

SONY®

Notes on the AC power adaptor

Use only the AC power adaptor and USB cradle supplied with the player. Do not use any other AC power adaptor since this may cause the player to malfunction.

The player is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the player itself has been turned off.

If you are not going to use the player for a long time, be sure to disconnect the power supply. To remove the AC power adaptor from the wall outlet, grasp the adaptor plug itself; never pull the cord.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

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SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COM- POSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1
SERVICING NOTES

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 ˚C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 ˚C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscou-s (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

- Replacement of CXR704060-201GA (IC1003), MBM29SL800BE-90PBT (IC1101), S1R72003BOOA100 (IC2001), CXR710160-211GH (IC3001), CXD1616GH (IC7001) and EDL1216CASA-10L-E (IC7002) used in this set requires a special tool.

System requirements

Computer	IBM PC/AT or Compatible
	• CPU: Pentium II 400 MHz or higher (Pentium III 450 MHz or higher is recommended.) • Hard disk drive space: 200 MB or more (1.5 GB or more is recommended.) (The amount of space will vary according to the Windows version and the number of music les stored on the hard disk.) • RAM: 64 MB or more (128 MB or more is recommended.)
	Others • CD drive (capable of digital playback by WDM) • Sound Board • USB port (Hi-Speed USB is supported.)
Operating System	Factory installed: Windows XP Media Center Edition 2004/Windows XP Media Center Edition/ Windows XP Professional/Windows XP Home Edition/Windows 2000 Professional/ Windows Millennium Edition/Windows 98 Second Edition
Display	High Color (16 bit) or higher, 800 600 dots or better (1024 × 768 dots or better is recommended.)
Others	• Internet access: for Web registration, EMD services and CDDB • Windows Media Player (version 7.0 or higher) installed for playing WMA les

Notes

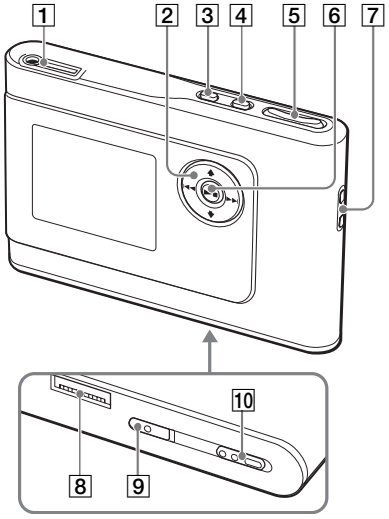
- SonicStage is not supported by the following environments:
  – Operating systems other than those the indicated above
  – Personally constructed PCs or operating systems
  – An environment that is an upgrade of the original manufacturer-installed operating system
  – Multi-boot environment
  – Multi-monitor environment
  – Macintosh
- We do not guarantee trouble-free operation on all computers that satisfy the system requirement.
- The NTFS format of Windows XP/Windows 2000 Professional can be used only with the standard (factory) settings.
- For Windows 2000 Professional users, install Service Pack 3 or later version before using the software.
- We do not guarantee trouble-free operation of the system suspend, sleep, or hibernation function on the computers.

SECTION 2
GENERAL

This section is extracted from instruction manual.

Guide to Parts and Controls

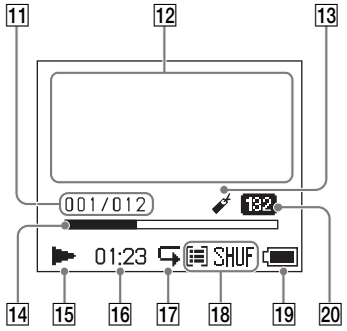
Player



1 ∩ (headphones)/LINE OUT jack
2 ↑, ↓, ⏮, ⏭ buttons
3 MENU button
4 MODE button
5 VOLUME +*/– buttons
6 ►■ (play/stop) button
7 Hole for hand strap**
8 USB cradle connector
9 BUILT-IN BATTERY switch
10 HOLD switch

* This button has a tactile dot.
** You can attach your own hand strap.

Player display



11 Track number indicator
12 Character information display
13 Bookmark indicator
14 Playback progress bar
15 Playback indicator
16 Playing time
17 Repeat indicator
18 Play mode indicator
Sound indicator
19 Battery indicator
20 Bit rate

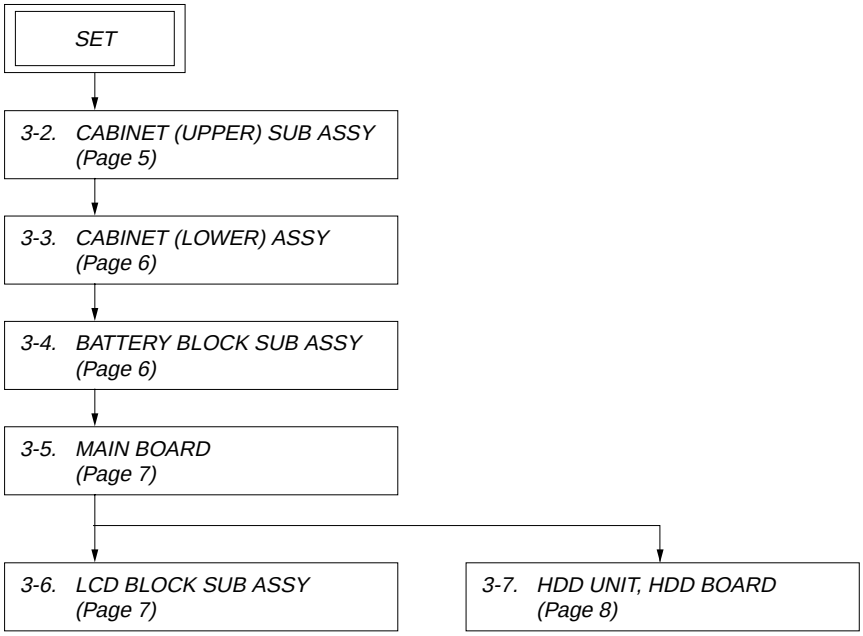
About the serial number

The serial number provided for this player is required for the customer registration. The number is on a label on the rear of the player.

SECTION 3
DISASSEMBLY

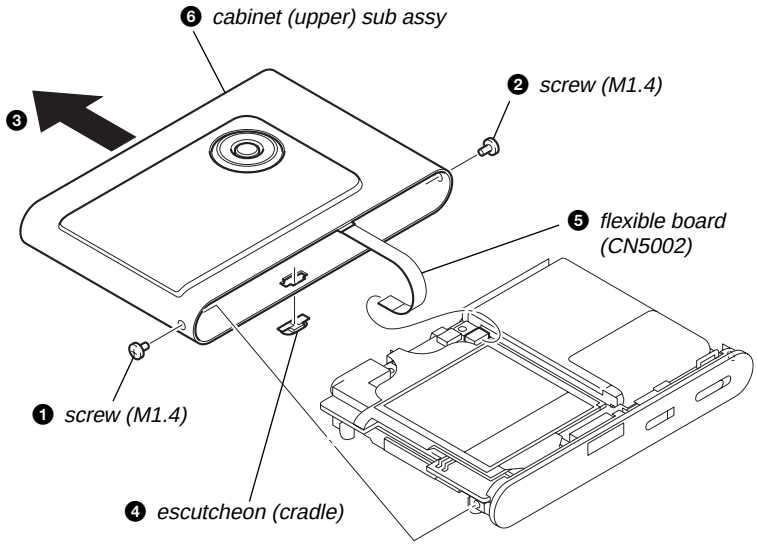
- This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

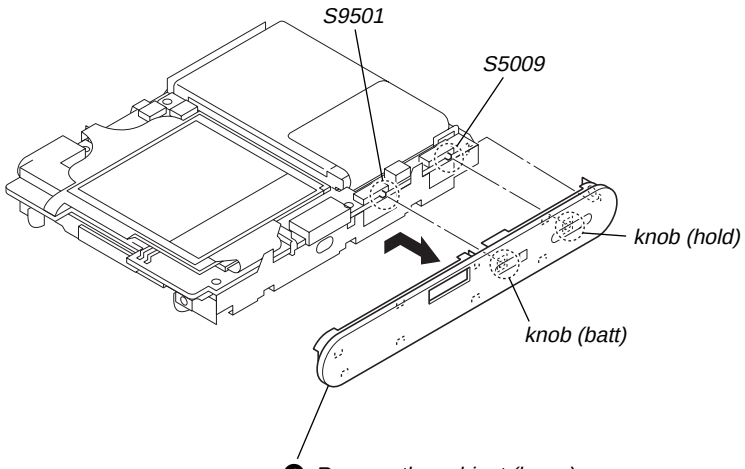

SET
3-2. CABINET (UPPER) SUB ASSY (Page 5)
3-3. CABINET (LOWER) ASSY (Page 6)
3-4. BATTERY BLOCK SUB ASSY (Page 6)
3-5. MAIN BOARD (Page 7)
3-6. LCD BLOCK SUB ASSY (Page 7)
3-7. HDD UNIT, HDD BOARD (Page 8)

Note: Follow the disassembly procedure in the numerical order given.

3-2. CABINET (UPPER) SUB ASSY

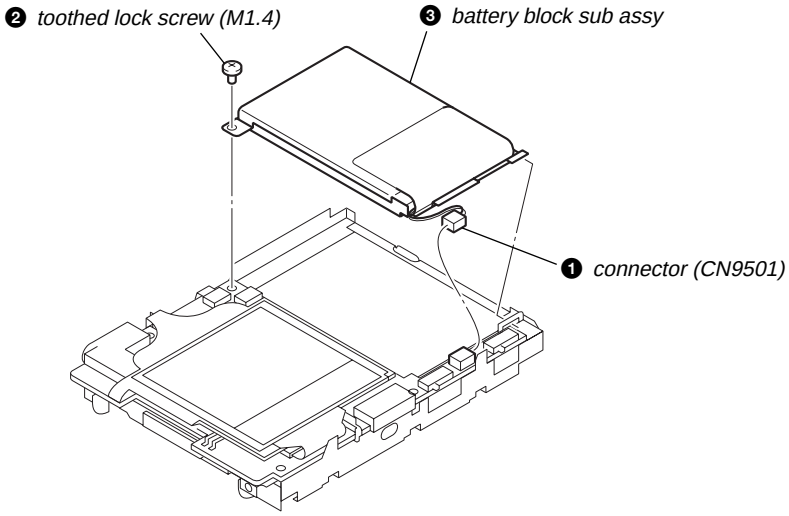


3-3. CABINET (LOWER) ASSY

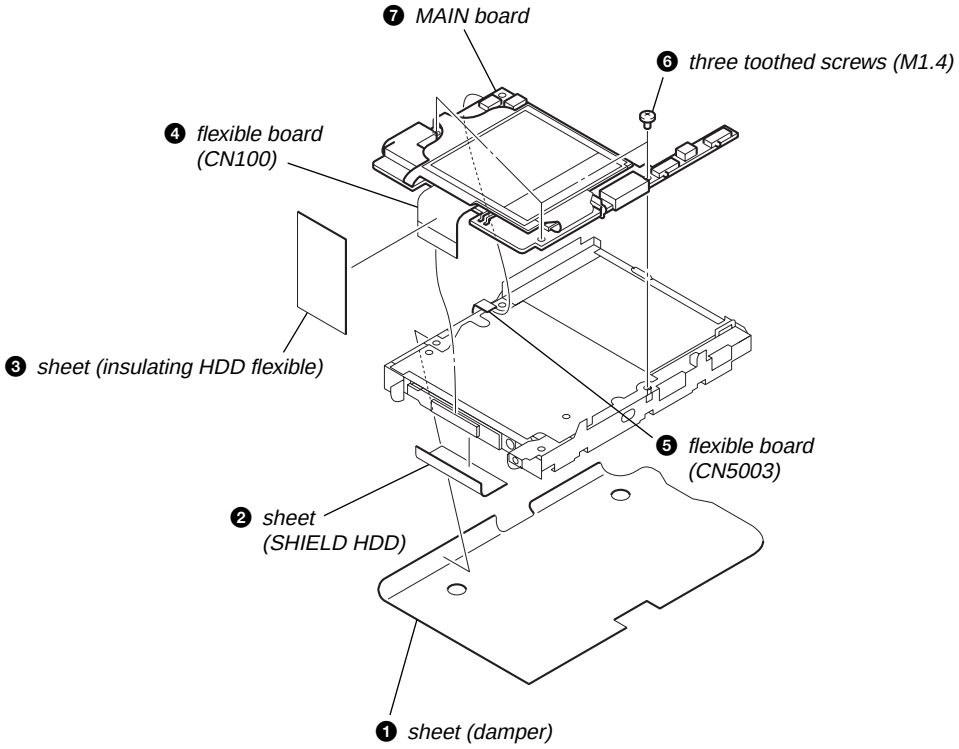


Note : When install the cabinet (lower) assy, adjust the position of two switches (S5009, S9501) and knob (batt, hold).

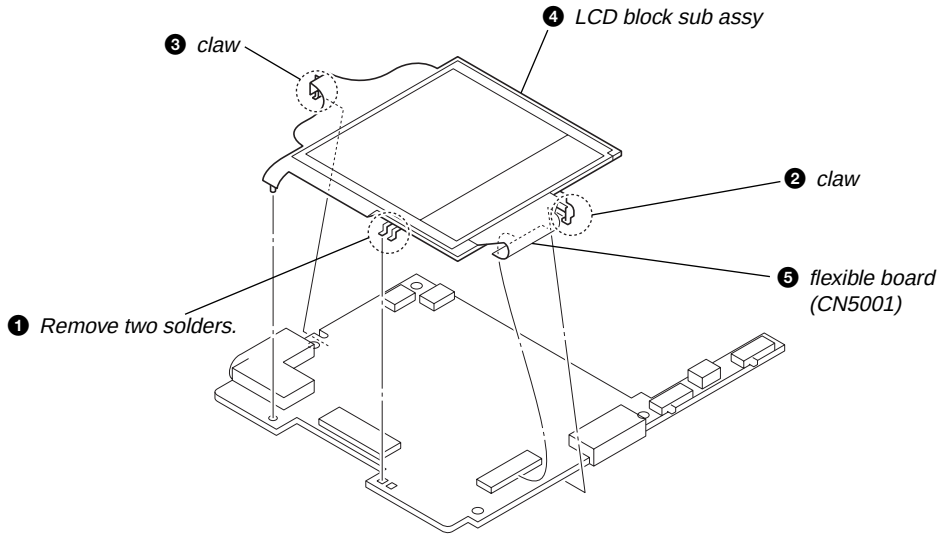
3-4. BATTERY BLOCK SUB ASSY



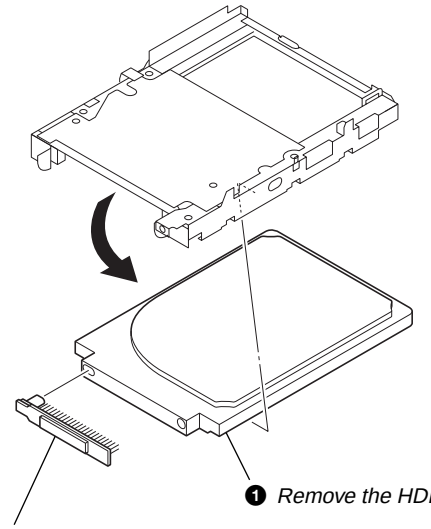
3-5. MAIN BOARD


❼ MAIN board
❻ three toothed screws (M1.4)
❹ flexible board (CN100)
❸ sheet (insulating HDD flexible)
❺ flexible board (CN5003)
❷ sheet (SHIELD HDD)
❶ sheet (damper)

3-6. LCD BLOCK SUB ASSY



3-7. HDD UNIT, HDD BOARD



❶ *Remove the HDD unit in the direction of arrow.*

❷ *HDD board*

Note : Extraction and insertion of a HDD board is performed perpendicularly.

SECTION 4
TEST MODE

1. OUTLINE

For the LCD display, the LCD on the main unit is shown, but the contents of LCD display on the remote commander are same.
Operation in the test mode is performed with the main unit. A key having no particular description in the text, indicates a main unit key.

Power supply voltage	: 3.65 to 3.75 V
Volume	: 24
SOUND EQ	: OFF
AVLS	: OFF
[HOLD] switch	: OFF
Set states	: horizontal states

2. SETTING THE TEST MODE

1. Supply power to the set.
2. Switch-on the [HOLD] switch on the main unit.
3. Operate as follows.

- **When use only main unit**

While pressing the [MODE] key on the main unit, press the key on the main unit as following order.
[⏭] → [⏭] → [⏮] → [⏮] → [⏭] → [⏮] → [⏭] → [⏮] → [⏫] → [⏬]

- **When use the main unit and remote commander**

While pressing the [MODE] key on the main unit, press the key on the remote commander as following order.
[⏭] → [⏭] → [⏮] → [⏮] → [⏭] → [⏮] → [⏭] → [⏮] → [📁+] → [📁–]

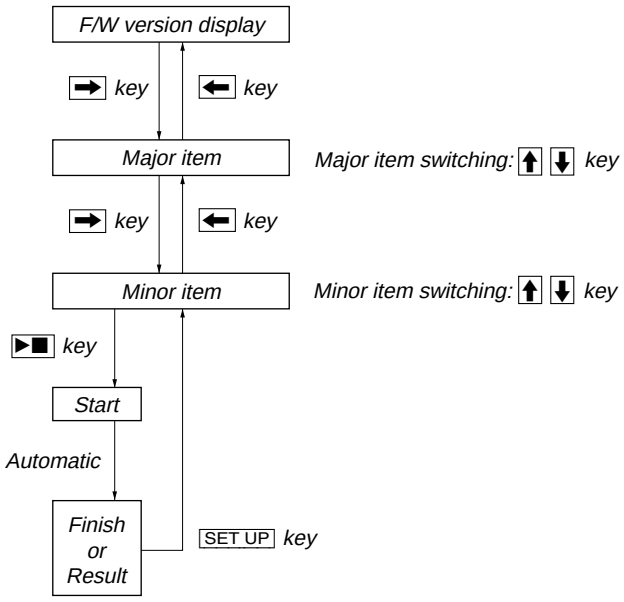
4. Switch-off the [HOLD] switch on the main unit and enter the test mode.

3. RELEASING THE TEST MODE

Press the [SET UP] key on the main unit or [■] key on the remote commander for 1.5 seconds or more, turn off the power and release the test mode.

4. CONFIGURATION OF THE TEST MODE

Flow of the test mode:



5. OPERATION OF THE TEST MODE

5-1. Power

5-1-1. Power supply voltage check

This mode is used in case power supply voltage in the state where all power supply lines (1.2 V/1.5 V/1.8 V/2.0 V/2.4 V/3.3 V/VSTBY/VDC) are starting is checked.

Checking method:

1. Enter the test mode.
2. Press the [➡] key to display major item, and press the [⏫] [⏬] key to select the "POWER".

LCD display

POWER

3. Press the [➡] key to display minor item, and press the [⏫] [⏬] key to select the "V CHK".

LCD display

V CHK

4. Press the [▶■] key, "START" is displayed and all power supply lines are started.

LCD display

START

5. Press the [MODE] key, "HD OFF/ON" is displayed. Each time [MODE] key is pressed, hard disk drive power supply ON/OFF switch is performed.

LCD display

HD OFF/ON

6. Press the [SET UP] key, return to minor item selection screen.

5-1-2. Consumption current (read state) check

This mode is used in case consumption current (read state) in the state where the hard disk drive has booted is checked.

Checking method:

1. Enter the test mode.
2. Press the [➡] key to display major item, and press the [⏫] [⏬] key to select the "POWER".

LCD display

POWER

3. Press the [➡] key to display minor item, and press the [⏫] [⏬] key to select the "A RD".

LCD display

A RD

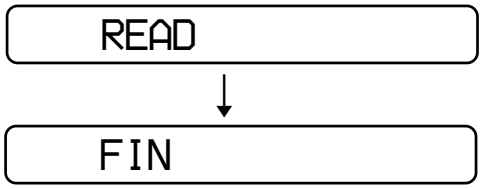
4. Press the [▶■] key, "READY?" is displayed. In this state, Each time [MODE] key is pressed, EL back light ON/OFF switch is performed.

LCD display

READY?

5. Press the [▶■] key, “READ” is displayed and hard disk drive becomes read state.
   After 10 seconds, “FIN” is displayed automatically and read state is completed.

LCD display



6. Press the [SET UP] key, return to minor item selection screen.

5-1-3. Consumption current (write state) check

This mode is used in case consumption current (write state) in the state where the hard disk drive has booted is checked.

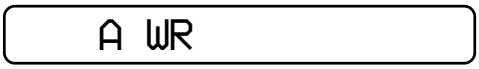
Checking method:

1. Enter the test mode.
2. Press the [➡] key to display major item, and press the [⬆] [⬇] key to select the “POWER”.

LCD display

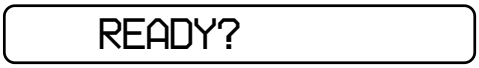
3. Press the [➡] key to display minor item, and press the [⬆] [⬇] key to select the “A WR”.

LCD display



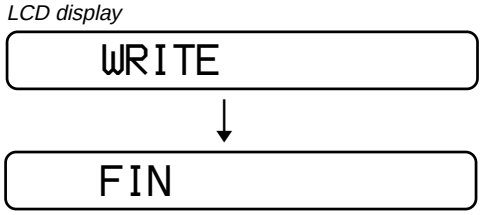
4. Press the [▶■] key, “READY?” is displayed. In this state, Each time [MODE] key is pressed, EL back light ON/OFF switch is performed.

LCD display



5. Press the [▶■] key, “WRITE” is displayed and hard disk drive becomes write state.
   After 10 seconds, “FIN” is displayed automatically and write state is completed.

LCD display



6. Press the [SET UP] key, return to minor item selection screen.

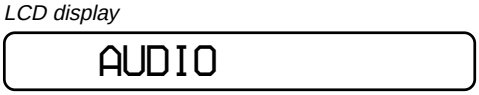
5-2. Audio

The [VOLUME +] key on the main unit or [PLAY MODE] on the remote commander performs switch of HP/LINE.
While playing the audio track, it's in a repeat state. If [▶■] key is pressed, it’s stopped.

Setting method of the audio test mode:

1. The data for audio test mode is copied to hard disk drive.
2. Enter the test mode.
3. Press the [➡] key to display major item, and press the [⬆] [⬇] key to select the “AUDIO”.

LCD display



4. Press the [➡] key to display minor item, and press the [⬆] [⬇] key to select the “TESTLD”.

LCD display

5. Press the [▶■] key, “START” is displayed. Then automatically reboot.

LCD display

6. After reboot, narrowing-down screen “Artist” is checked and enter the test mode.
   Audio test mode (5-2-1 to 5-2-8) is performed in this state.

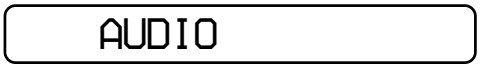
5-2-1. Output check

“1 kHz 0 dBs L-ch/R-ch” audio signal is outputted.

Checking method:

1. Enter the audio test mode.
2. Press the [➡] key to display major item, and press the [⬆] [⬇] key to select the “AUDIO”.

LCD display



3. Press the [➡] key to display minor item, and press the [⬆] [⬇] key to select the “OUTPUT”.

LCD display

4. Press the [▶■] key, “START” is displayed and “1 kHz 0 dBs L-ch/R-ch” audio signal is outputted. In this state, Each time [MODE] key is pressed, MUTE ON/OFF switch is performed.

LCD display

5. Press the [SET UP] key, return to minor item selection screen.

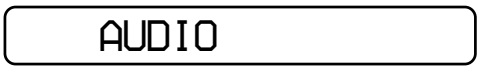
5-2-2. S/N check

“Infinity Zero” audio signal is outputted.

Checking method:

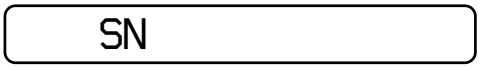
1. Enter the audio test mode.
2. Press the [➡] key to display major item, and press the [⬆] [⬇] key to select the “AUDIO”.

LCD display



3. Press the [➡] key to display minor item, and press the [⬆] [⬇] key to select the “SN”.

LCD display



4. Press the [▶■] key, “START” is displayed and “Infinity Zero” audio signal is outputted.

LCD display

5. Press the [SET UP] key, return to minor item selection screen.

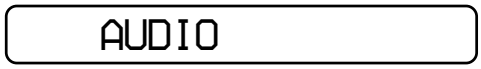
5-2-3. Frequency characteristic check

"20 Hz/20 kHz/100 Hz/10 kHz 0 dBs L-ch/R-ch" audio signal is outputted.

Checking method:

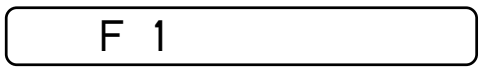
1. Enter the audio test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the "AUDIO".

LCD display



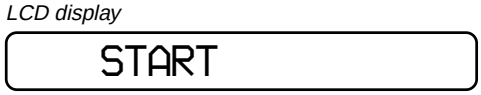
3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the "F 1".

LCD display



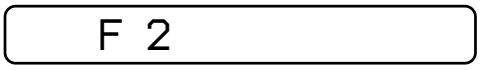
4. Press the [▶■] key, "START" is displayed and "20 Hz 0 dBs L-ch/R-ch" audio signal is outputted.

LCD display



5. Press the [SET UP] key, return to minor item selection screen.
6. Press the [↑] [↓] key to select the "F 2".

LCD display

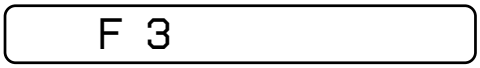


7. Press the [▶■] key, "START" is displayed and "20 kHz 0 dBs L-ch/R-ch" audio signal is outputted.

LCD display

8. Press the [SET UP] key, return to minor item selection screen.
9. Press the [↑] [↓] key to select the "F 3".

LCD display

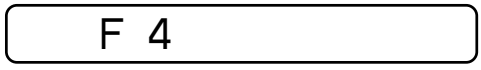


10. Press the [▶■] key, "START" is displayed and "100 Hz 0 dBs L-ch/R-ch" audio signal is outputted.

LCD display

11. Press the [SET UP] key, return to minor item selection screen.
12. Press the [↑] [↓] key to select the "F 4".

LCD display



13. Press the [▶■] key, "START" is displayed and "10 kHz 0 dBs L-ch/R-ch" audio signal is outputted.

LCD display

14. Press the [SET UP] key, return to minor item selection screen.

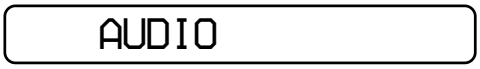
5-2-4. Channel separation check

"1 kHz 0 dBs L-ch/1 kHz 0 dBs R-ch" audio signal is outputted.

Checking method:

1. Enter the audio test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the "AUDIO".

LCD display



3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the "SEP LR".

LCD display

4. Press the [▶■] key, "START" is displayed and "1 kHz 0 dBs L-ch" audio signal is outputted. In this state, Each time [MODE] key is pressed, V-SUR switch is performed.

LCD display

5. Press the [SET UP] key, return to minor item selection screen.
6. Press the [↑] [↓] key to select the "SEP RL".

LCD display

7. Press the [▶■] key, "START" is displayed and "1 kHz 0 dBs R-ch" audio signal is outputted. In this state, Each time [MODE] key is pressed, V-SUR switch is performed.

LCD display

8. Press the [SET UP] key, return to minor item selection screen.

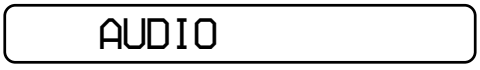
5-2-5. Maximum output check

"1 kHz 0 dBs L-ch/R-ch VOLUME: 30" audio signal is outputted.

Checking method:

1. Enter the audio test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the "AUDIO".

LCD display



3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the "MAXOUT".

LCD display

4. Press the [▶■] key, "START" is displayed and "1 kHz 0 dBs L-ch/R-ch VOLUME: 30" audio signal is outputted. In this state, Each time [MODE] key is pressed, AVLS ON/OFF switch is performed.

LCD display

5. Press the [SET UP] key, return to minor item selection screen

5-2-6. SOUND EQ check

"100 Hz/250 Hz/630 Hz/1.6 kHz/4 kHz/10 kHz –20 dBs L-ch/R-ch" audio signal is outputted.

Checking method:

1. Enter the audio test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the "AUDIO".

   LCD display

   AUDIO

3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the "EQ 1".

   LCD display

   EQ 1

4. Press the [▶■] key, "START" is displayed and "100 Hz –20 dBs L-ch/R-ch" audio signal is outputted. In this state, Each time [MODE] key is pressed, EQ MAX/MIN switch is performed.

   LCD display

   START

5. Press the [SET UP] key, return to minor item selection screen.
6. Press the [↑] [↓] key to select the "EQ 2".

   LCD display

   EQ 2

7. Press the [▶■] key, "START" is displayed and "250 Hz –20 dBs L-ch/R-ch" audio signal is outputted. In this state, Each time [MODE] key is pressed, EQ MAX/MIN switch is performed.

   LCD display

   START

8. Press the [SET UP] key, return to minor item selection screen.
9. Press the [↑] [↓] key to select the "EQ 3".

   LCD display

   EQ 3

10. Press the [▶■] key, "START" is displayed and "630 Hz –20 dBs L-ch/R-ch" audio signal is outputted. In this state, Each time [MODE] key is pressed, EQ MAX/MIN switch is performed.

    LCD display

    START

11. Press the [SET UP] key, return to minor item selection screen.
12. Press the [↑] [↓] key to select the "EQ 4".

    LCD display

    EQ 4

13. Press the [▶■] key, "START" is displayed and "1.6 kHz –20 dBs L-ch/R-ch" audio signal is outputted. In this state, Each time [MODE] key is pressed, EQ MAX/MIN switch is performed.

    LCD display

    START

14. Press the [SET UP] key, return to minor item selection screen.
15. Press the [↑] [↓] key to select the "EQ 5".

    LCD display

    EQ 5

16. Press the [▶■] key, "START" is displayed and "4 kHz –20 dBs L-ch/R-ch" audio signal is outputted. In this state, Each time [MODE] key is pressed, EQ MAX/MIN switch is performed.

    LCD display

    START

17. Press the [SET UP] key, return to minor item selection screen.
18. Press the [↑] [↓] key to select the "EQ 6".

    LCD display

    EQ 6

19. Press the [▶■] key, "START" is displayed and "10 kHz –20 dBs L-ch/R-ch" audio signal is outputted. In this state, Each time [MODE] key is pressed, EQ MAX/MIN switch is performed.

    LCD display

    START

20. Press the [SET UP] key, return to minor item selection screen.

5-2-7. BEEP check

BEEP sound is outputted.

Checking method:

1. Enter the audio test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the "AUDIO".

   LCD display

   AUDIO

3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the "BEEP".

   LCD display

   BEEP

4. Press the [▶■] key, "START" is displayed and BEEP sound is outputted.

   LCD display

   START

5. Press the [SET UP] key, return to minor item selection screen.

5-2-8. Sound pressure regulation level check

"1 kHz 0 dBs L-ch/R-ch" audio signal is outputted.

Checking method:

1. Enter the audio test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the "AUDIO".

   LCD display

   AUDIO

3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the "SPL".

   LCD display

   SPL

4. Press the [▶■] key, "START" is displayed and "1 kHz 0 dBs L-ch/R-ch" audio signal is outputted.

LCD display

START

5. Press the [SET UP] key, return to minor item selection screen.

5-3. Others

5-3-1. G-sensor check

X/Y/Z-axis direction is checked.

Checking method:

1. Enter the test mode.
2. Press the [➡] key to display major item, and press the [⬆] [⬇] key to select the "OTHERS".

LCD display

OTHERS

3. Press the [➡] key to display minor item, and press the [⬆] [⬇] key to select the "G TEST".

LCD display

G TEST

4. Press the [▶■] key, X-axis direction is displayed.

LCD display

X: ***

****: A/D value (hexadecimal)*

Note: "NG" is displayed when the G-sensor has broken (press the [SET UP] key, return to minor item selection screens).

LCD display

NG

5. Press the [▶■] key, Y-axis direction is displayed (press the [SET UP] key, return to minor item selection screens).

LCD display

Y: ***

****: A/D value (hexadecimal)*

6. Press the [▶■] key, Z-axis direction is displayed (press the [SET UP] key, return to minor item selection screens).

LCD display

Z: ***

****: A/D value (hexadecimal)*

7. Press the [SET UP] key, return to minor item selection screen.

5-3-2. Clock check

Clock operation is checked.

Checking method:

1. Enter the test mode.
2. Press the [➡] key to display major item, and press the [⬆] [⬇] key to select the "OTHERS".

LCD display

OTHERS

3. Press the [➡] key to display minor item, and press the [⬆] [⬇] key to select the "CLOCK".

LCD display

CLOCK

4. Press the [▶■] key, "START" is displayed. Then "OK" or "NG" is displayed automatically.

LCD displa

START

↓

OK

5. Press the [SET UP] key, return to minor item selection screen.

5-3-3. Key check

LCD display corresponding to the pushed key is performed.

Checking method:

1. Enter the test mode.
2. Press the [➡] key to display major item, and press the [⬆] [⬇] key to select the "OTHERS".

LCD display

OTHERS

3. Press the [➡] key to display minor item, and press the [⬆] [⬇] key to select the "KEY CH".

LCD display

KEY CH

4. Press the [▶■] key, "START" is displayed and LCD display corresponding to the pushed key is performed.
Press on all the keys of main unit displays "SET OK".
Press on all the keys of remote commander displays "RMC OK".

Key of main unit	LCD display	Key of remote commander	LCD display
[▶■]	PLAY	[▶II]	R PLAY
[SET UP]	SETUP	[■]	R STOP
[MODE]	MODE	[▶▶I]	R FR
[▶▶I]	FF	[I◀◀]	R REW
[I◀◀]	REW	[P MODE]	R PMD
[⬆]	UP	[SOUND]	R SND
[⬇]	DOWN	[DISPLAY]	R DISP
[VOLUME +]	VOL+	[VOL +]	R VOL+
[VOLUME –]	VOL–	[VOL –]	R VOL–
		[🗀 +]	R FDUP
		[🗀 –]	R FDDW

5. Switch-on the [HOLD] switch on the main unit. Then Switch-off the [HOLD] switch on the main unit, "FMTOK?" is displayed.

LCD display

FMTOK?

6. Press the [▶■] key, format of hard disk drive is performed (press the [SET UP] key, return to minor item selection screens). Then "OK" or "NG" is displayed automatically.
7. Press the [SET UP] key, return to minor item selection screen.

5-3-4. LCD display check

LCD display is checked.

Checking method:

1. Enter the test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the “OTHERS”.

   LCD display

   OTHERS
3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the “LCD 1”.

   LCD display

   LCD 1
4. Press the [▶■] key, LCD all segments of main unit and remote commander are turned on.
5. Press the [SET UP] key to display minor item, and press the [↑] [↓] key to select the “LCD 2”.

   LCD display

   LCD 2
6. Press the [▶■] key, LCD all segments of main unit and remote commander are turned off.
7. Press the [SET UP] key to display minor item, and press the [↑] [↓] key to select the “LCD 3”.

   LCD display

   LCD 3
8. Press the [▶■] key, monochrome lattice is displayed on the LCD of main unit.
9. Press the [SET UP] key to display minor item, and press the [↑] [↓] key to select the “LCD 4”.

   LCD display

   LCD 4
10. Press the [▶■] key, monochrome lattice (reverse version of step 8) is displayed on the LCD of main unit.
11. Press the [SET UP] key, return to minor item selection screen.

5-3-5. G-sensor adjustment

X/Y/Z-axis direction is adjusted.

Adjustment method:

1. Enter the test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the “OTHERS”.

   LCD display

   OTHERS
3. Press the [→] key to display minor item, and press the [↑] [↓] keyÍ to select the “G CLB”.

   LCD display

   G CLB
4. Press the [▶■] key, “+X” is displayed. Main unit is fixed so that ① of fig.1 may become downward and press the [▶■] key.

   LCD display

   +X
5. “–X” is displayed. Main unit is fixed so that ② of fig.1 may become downward and press the [▶■] key.

   LCD display

   –X
6. “+Y” is displayed. Main unit is fixed so that ③ of fig.1 may become downward and press the [▶■] key.

   LCD display

   +Y
7. “–Y” is displayed. Main unit is fixed so that ④ of fig.1 may become downward and press the [▶■] key.

   LCD display

   –Y
8. “+Z” is displayed. Main unit is fixed so that ⑤ of fig.1 may become downward and press the [▶■] key.

   LCD display

   +Z
9. “–Z” is displayed. Main unit is fixed so that ⑥ of fig.1 may become downward and press the [▶■] key.

   LCD display

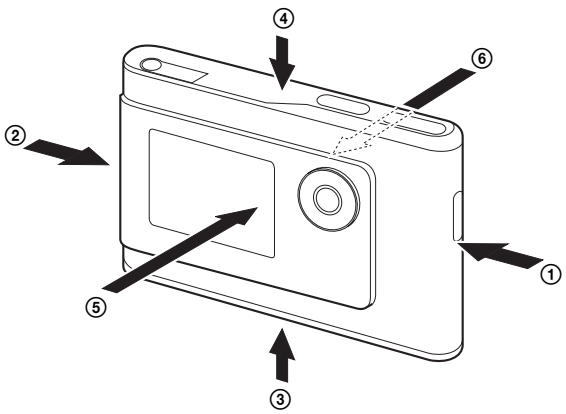
   –Z
10. “CALIB” is displayed. Press the [▶■] key, G-sensor is adjusted. Then “FIN”, “DAT NG” or “SEN NG” is displayed automatically.

    LCD display

    CALIB
    ↓
    FIN

    FIN : adjusted normally.
    DAT NG : The data for performing a calibration is faulty.
    SEN NG : The value acquired from the G-sensor is faulty.
11. Press the [SET UP] key, return to minor item selection screen.

Fig.1 Axis direction of G-sensor adjustment



5-3-6. G-sensor adjustment check

this mode checks that G-sensor adjustment is performed or not performed.

Checking method:

1. Enter the test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the “OTHERS”.

   LCD display

   OTHERS

3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the “G CHK”.

   LCD display

   G CHK

4. Press the [▶■] key, “START” is displayed. Then “OK” or “YET” is displayed automatically.

   LCD display

   START

   ↓

   OK

5. Press the [SET UP] key, return to minor item selection screen.

5-3-7. Hard disk drive format

This mode is used when performing the format of hard disk drive.

Checking method:

1. Enter the test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the “OTHERS”.

   LCD display

   OTHERS

3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the “FORMAT”.

   LCD display

   FORMAT

4. Press the [▶■] key, “START” is displayed and format of hard disk drive is performed. After performing format, “OK” or “NG” is displayed automatically.

   LCD display

   START

   ↓

   OK

5. Press the [SET UP] key, return to minor item selection screen.

5-3-8. Hard disk drive all sector read

All sector of hard disk drive is read.

Checking method:

1. Enter the test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the “OTHERS”.

   LCD display

   OTHERS

3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the “SC RD1”

   LCD display

   SC RD1

4. Press the [▶■] key, “READY?” is displayed .

   LCD display

   READY?

5. Press the [▶■] key, “READ” is displayed and first 1/3 sector of hard disk drive is read. This operation takes about 50 minutes. Then the number of error sector is displayed automatically.

   LCD display

   READ

   ↓

   ******

   ****** *: number of error sector*

6. Press the [SET UP] key to display minor item, and press the [↑] [↓] key to select the “SC RD2”

   LCD display

   SC RD2

7. Press the [▶■] key, “READY?” is displayed .

   LCD display

   READY?

8. Press the [▶■] key, “READ” is displayed and last 2/3 sector of hard disk drive is read. This operation takes about 100 minutes. Then the number of error sector is displayed automatically.

   LCD display

   READ

   ↓

   ******

   ****** *: number of error sector*

9. Press the [SET UP] key, return to minor item selection screen.

5-3-9. Destination setting

Setting the destination.

Checking method:

1. Enter the test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the “OTHERS”.

   LCD display

   OTHERS

3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the “DEST”.

   LCD display

   DEST

4. Press the [▶■] key. Press the [MODE] key, destination (J1/U2/CEX/CEK) is selected.
   Press the [▶■] key, destination is entered.
   Press the [SET UP] key when canceling.

5-3-10. Language setting

Setting the language.

Checking method:

1. Enter the test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the “OTHERS”.

   LCD display

   OTHERS

3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the “LANG”.

   LCD display

   LANG

4. Press the [▶■] key. Press the [MODE] key, language (JAP/ENG/FRE/GER/ITA/SPA) is selected.
   Press the [▶■] key, destination is entered.
   Press the [SET UP] key when canceling.

5-3-11. Sound pressure regulation setting

Setting the sound pressure regulation.

Checking method:

1. Enter the test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the “OTHERS”.

   LCD display

   OTHERS

3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the “SP SET”.

   LCD display

   SP SET

4. Press the [▶■] key. Press the [MODE] key, sound pressure regulation ON/OFF is selected. Press the [▶■] key, destination is entered.
   Press the [SET UP] key when canceling.

5-3-12. Factory setting

Factory setting is performed.

Checking method:

1. Enter the test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the “OTHERS”.

   LCD display

   OTHERS

3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the “SHIP”.

   LCD display

   SHIP

4. Press the [▶■] key , factory setting is performed. After the setting, “FIN” is displayed.

   LCD display

   FIN

5. Press the [SET UP] key, return to minor item selection screen.

5-3-13. SDRAM check

This mode is used for the check of SDRAM.

Checking method:

1. Enter the test mode.
2. Press the [→] key to display major item, and press the [↑] [↓] key to select the “OTHERS”.

   LCD display

   OTHERS

3. Press the [→] key to display minor item, and press the [↑] [↓] key to select the “RAMCHK”.

   LCD display

   RAMCHK

4. Press the [▶■] key, “START” is displayed and SDRAM is checked. This operation takes about 20 seconds. After checked, “OK” or “NG” is displayed automatically.

   LCD display

   START

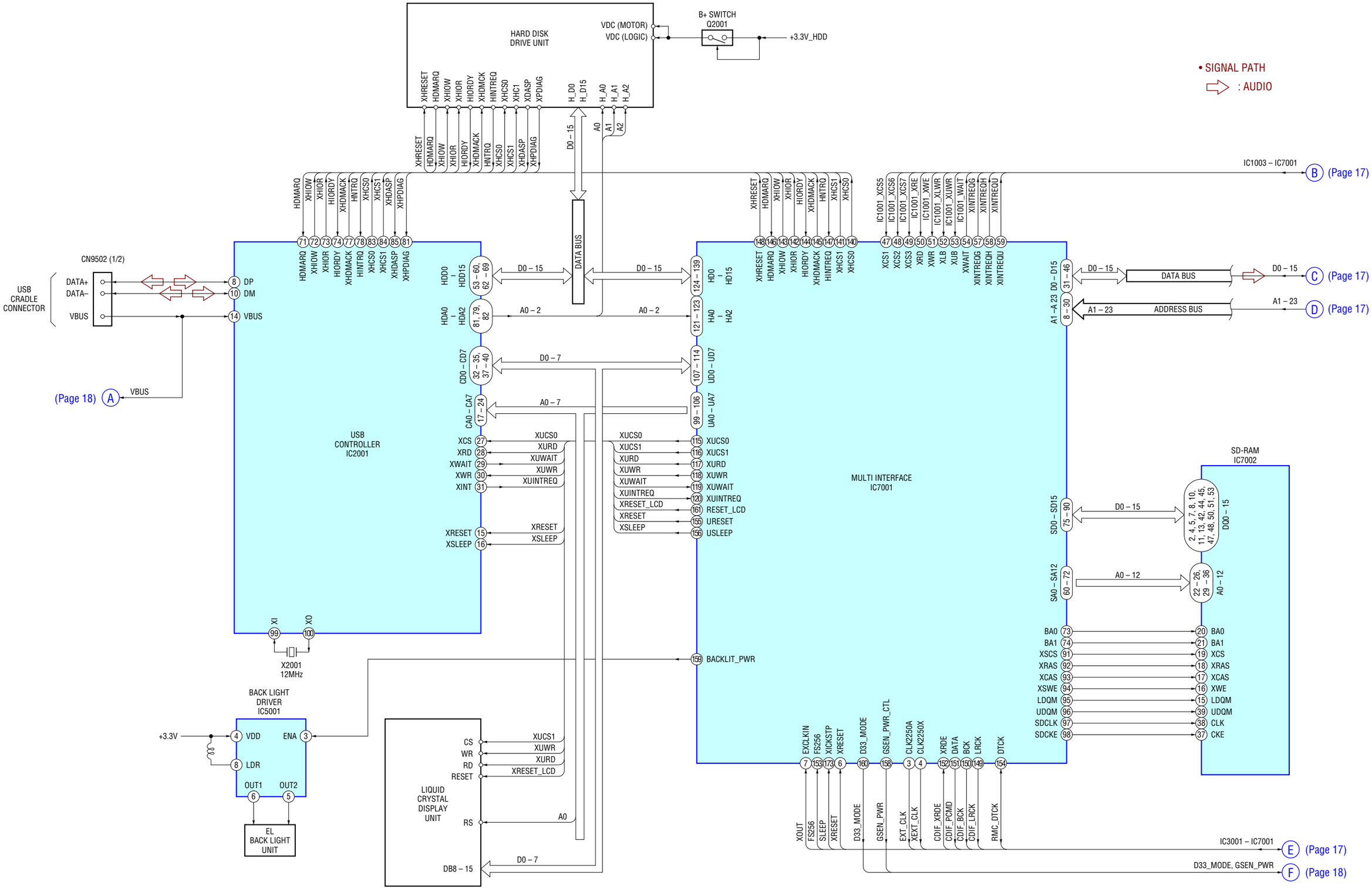
   ↓

   OK

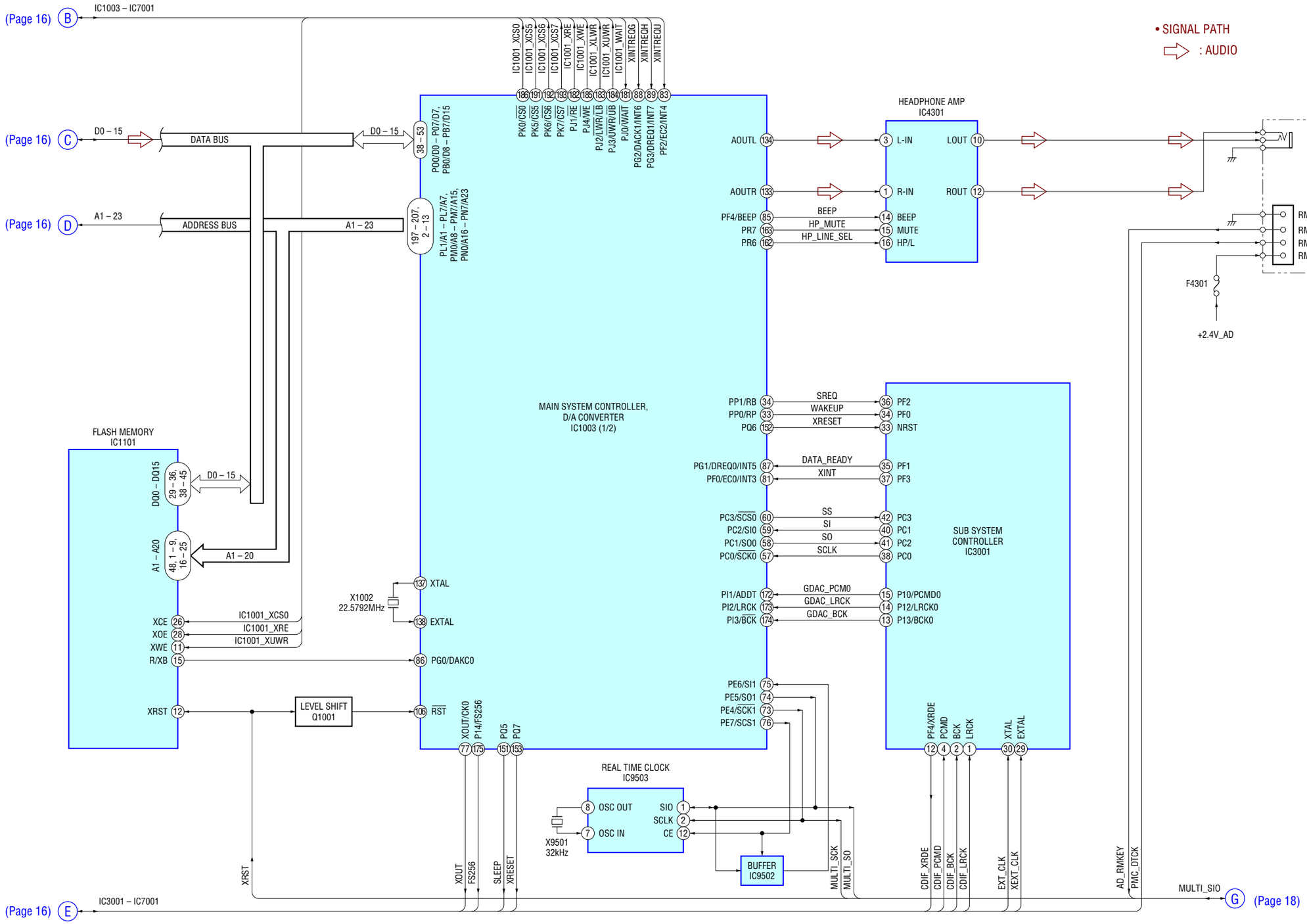
5. Press the [SET UP] key, return to minor item selection screen.

SECTION 5
DIAGRAMS

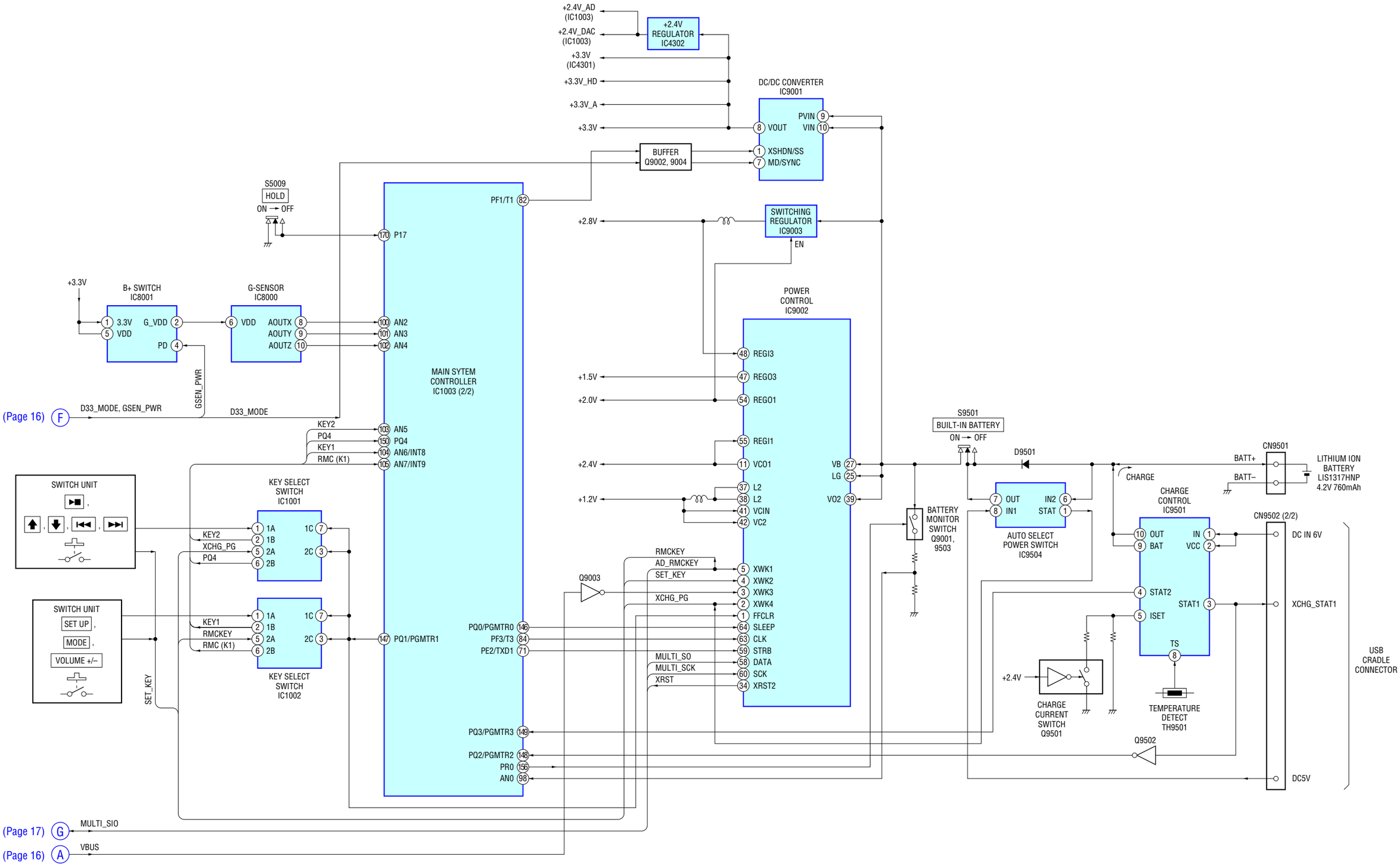
5-1. BLOCK DIAGRAM – MAIN Section (1/2) –



5-2. BLOCK DIAGRAM – MAIN Section (2/2) –



5-3. BLOCK DIAGRAM – KEY/POWER SUPPLY Section –



• Note for Printed Wiring Boards and Schematic Diagrams

Note on Printed Wiring Board:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- △ : internal component.
- ▬ : Pattern from the side which enables seeing.

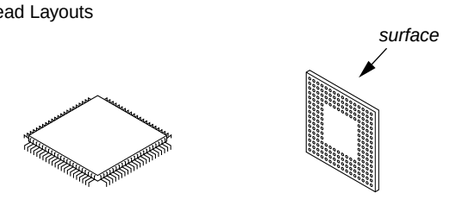
(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

- MAIN and HDD boards are multi-layer printed board. However, the patterns of intermediate-layer have not been included in diagram.

* Replacement of IC1003, 1101, 2001, 3001, 7001 and 7002 used in this set requires a special tool.

- Lead Layouts



Lead layout of conventional IC　　CSP (chip size package)

Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬ : B+ Line.
- Power voltage is dc 4.2 V and fed with regulated dc power supply from CN9501.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : PLAYBACK
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : AUDIO

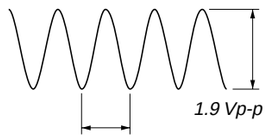
* Replacement of IC1003, 1101, 2001, 3001, 7001 and 7002 used in this set requires a special tool.

- The voltage and waveform of CSP (chip size package) cannot be measured, because its lead layout is different form that of conventional IC.

• Waveform

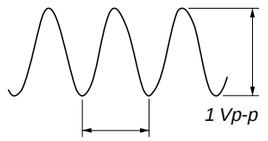
– MAIN Board –

① X1002



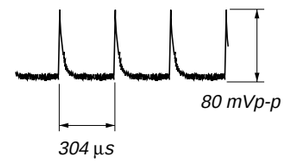
500 mV/DIV, 20 ns/DIV

② IC9503 ⑧ (OSCOUT)



200 mV/DIV, 10 µs/DIV

③ IC9001 ⑧ (VOUT)

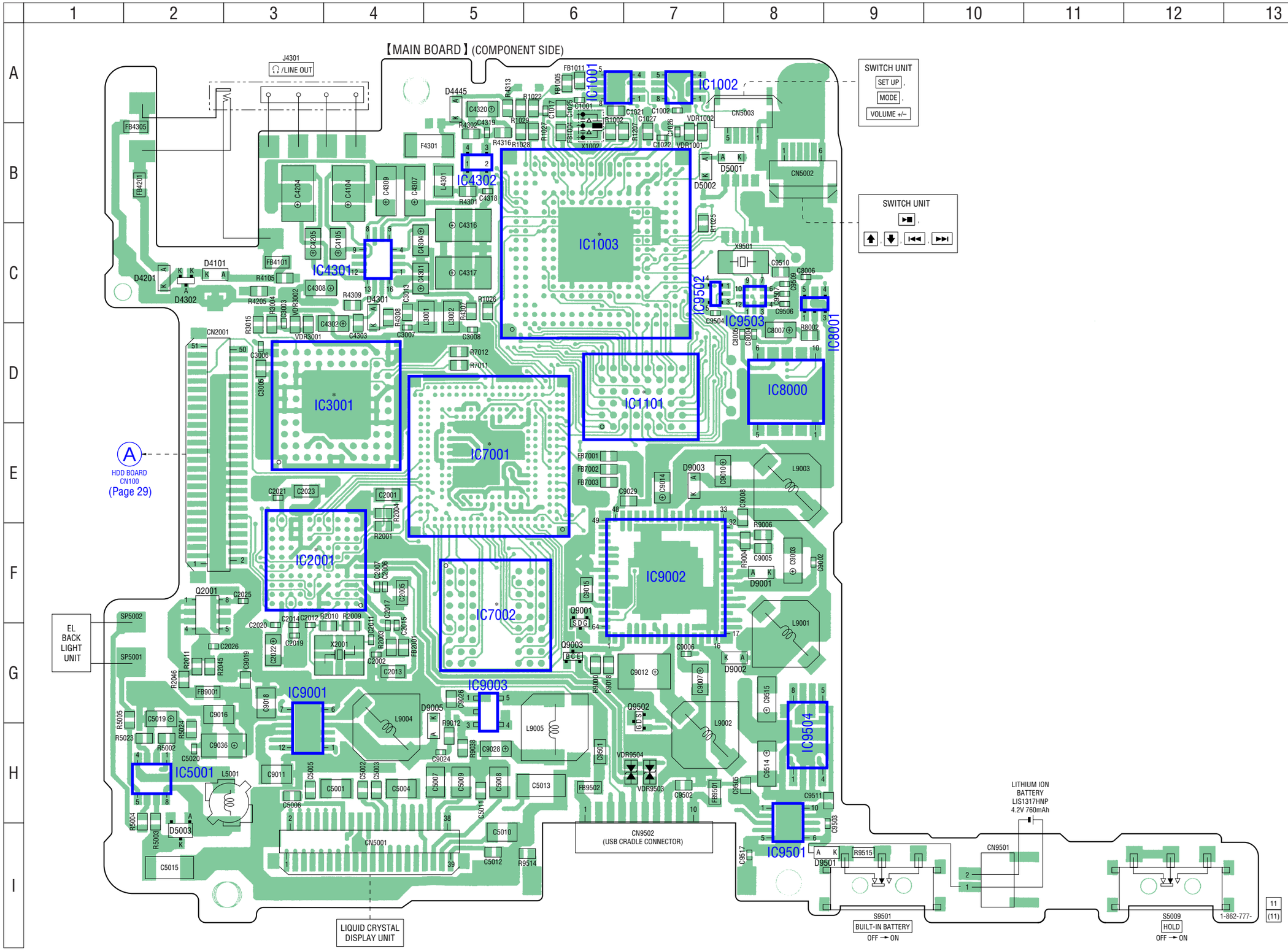


20 mV/DIV, 100 µs/DIV

5-4. PRINTED WIRING BOARD – MAIN Section (Component Side) – :Uses unleaded solder.

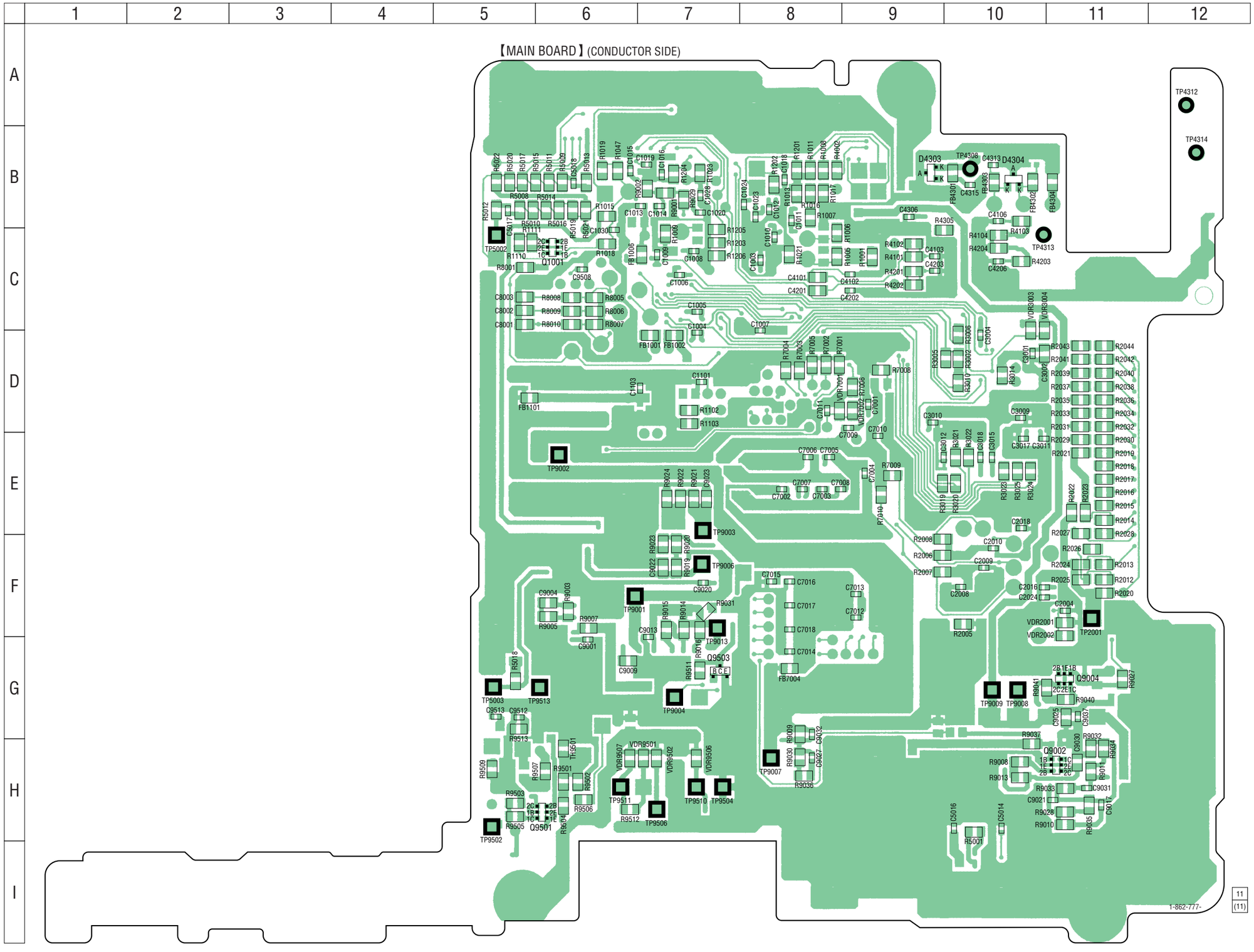
- **Semiconductor Location**

Ref. No.	Location
D4101	C-2
D4201	C-2
D4301	C-4
D4302	C-2
D4445	A-5
D5001	B-8
D5002	B-7
D5003	I-2
D9001	F-8
D9002	G-8
D9003	E-7
D9005	H-5
D9006	I-9
D9501	I-9
IC1001	A-6
IC1002	A-7
IC1003	C-6
IC1101	D-7
IC2001	F-3
IC3001	D-4
IC4301	C-4
IC4302	B-5
IC5001	H-2
IC7001	E-5
IC7002	F-5
IC8000	D-8
IC8001	C-8
IC9001	H-3
IC9002	F-7
IC9003	G-5
IC9501	H-8
IC9502	C-7
IC9503	C-8
IC9504	H-8
Q2001	F-2
Q9001	F-6
Q9003	G-6
Q9502	G-7
VDR9503	H-7
VDR9504	H-7



5-5. PRINTED WIRING BOARD – MAIN Section (Conductor Side) – :Uses unleaded solder.

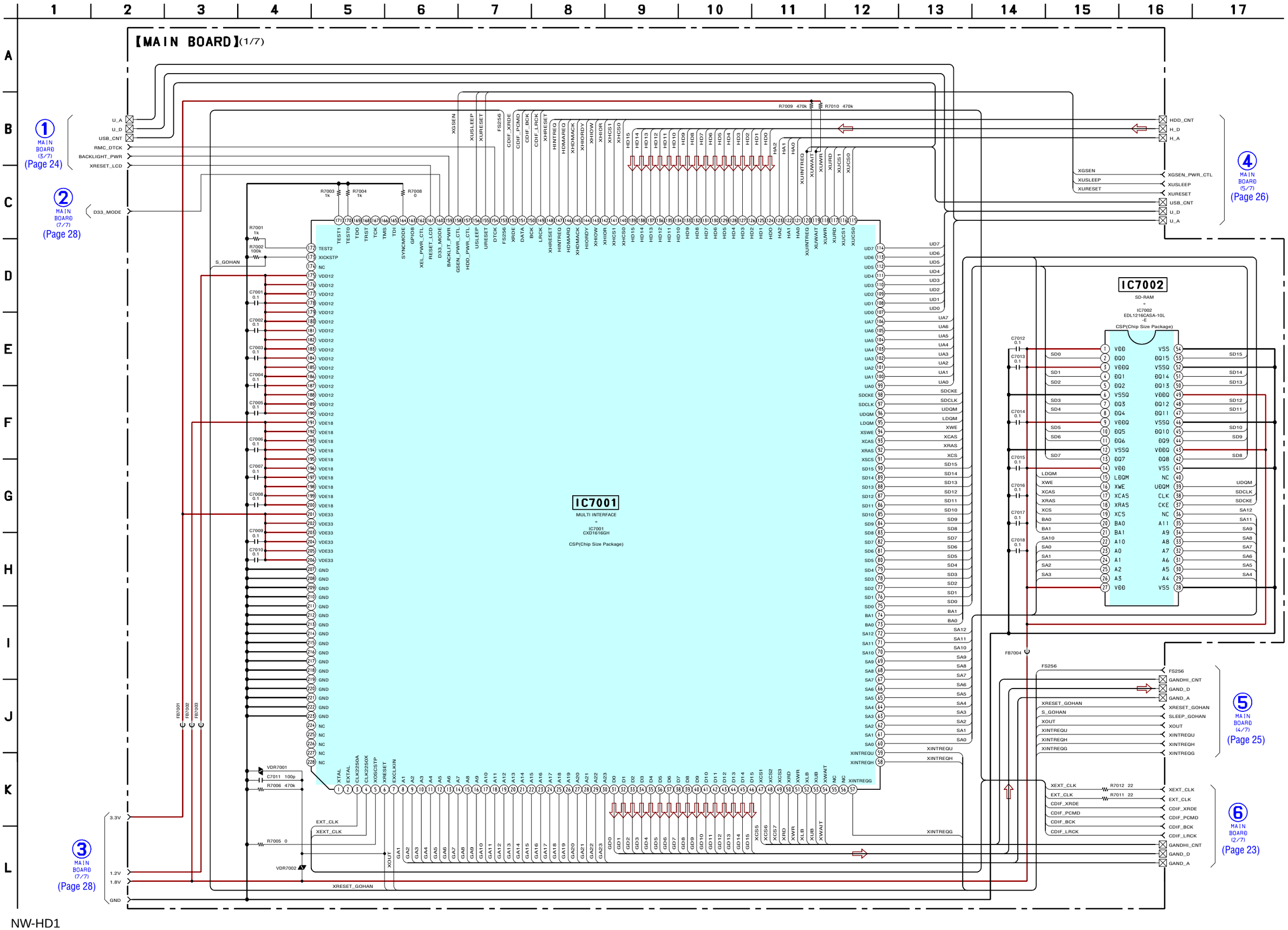
【MAIN BOARD】(CONDUCTOR SIDE)



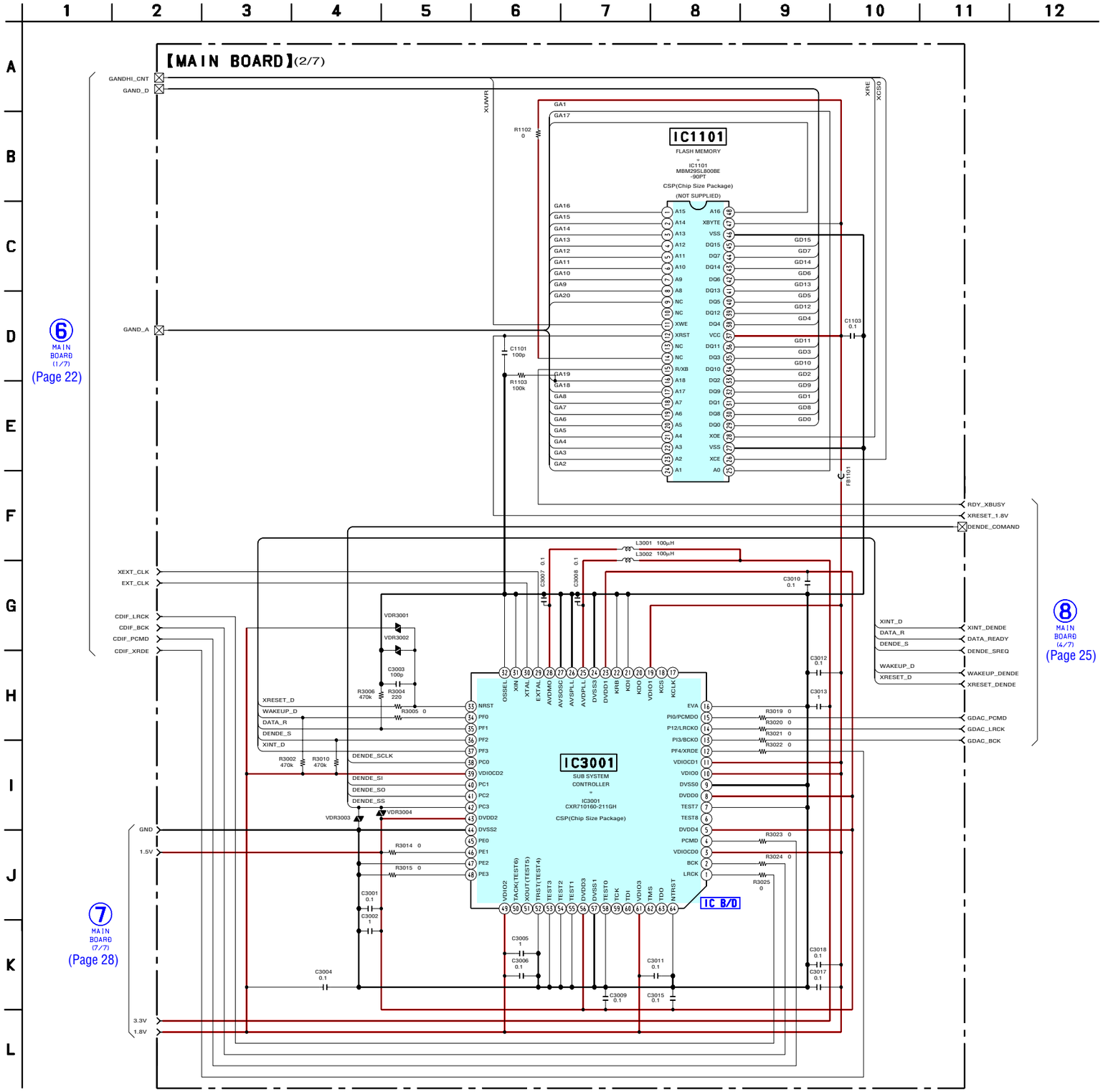
- **Semiconductor Location**

Ref. No.	Location
D4303	B-9
D4304	B-10
Q1001	C-6
Q9002	H-11
Q9004	G-11
Q9501	H-6
Q9503	G-7

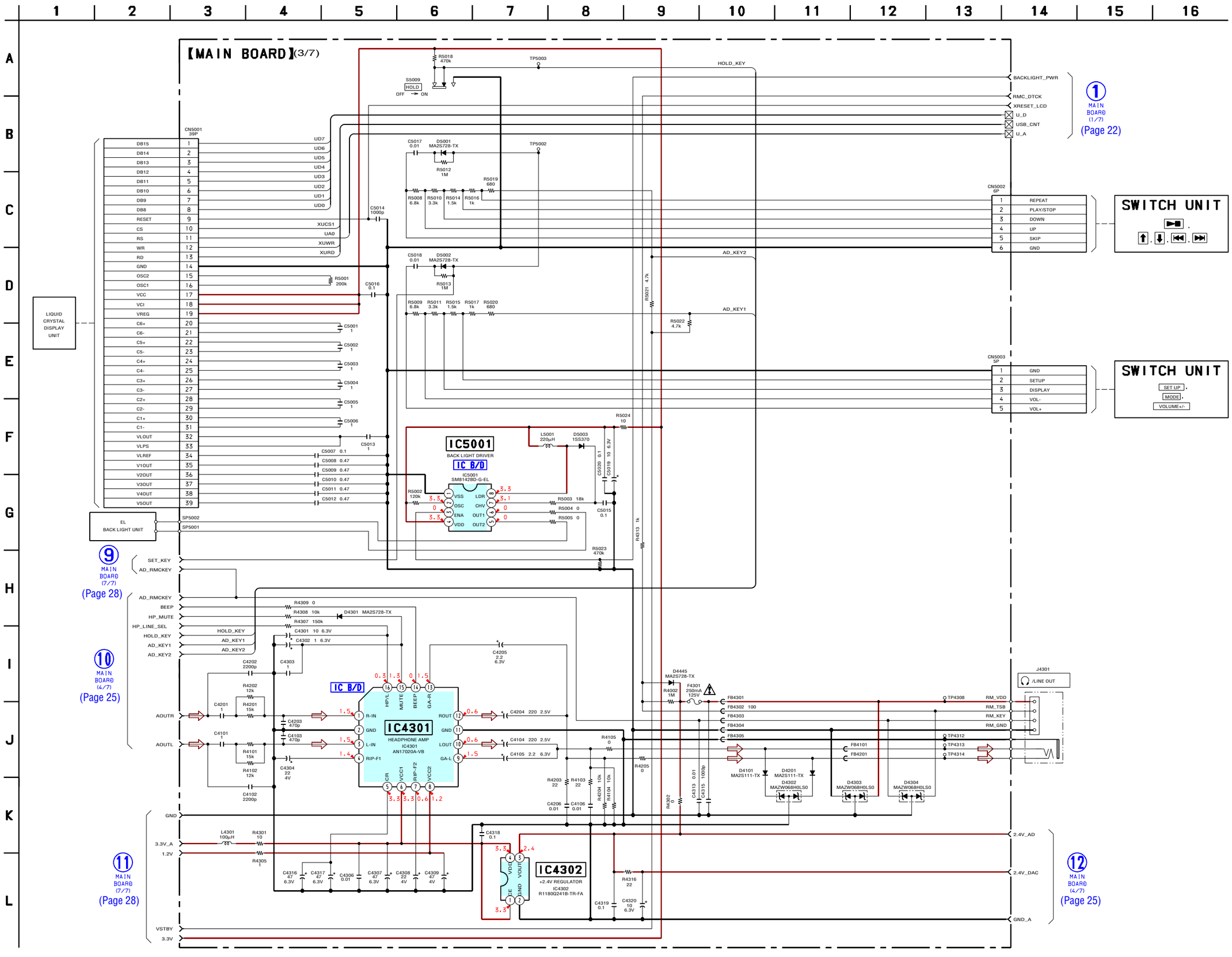
5-6. SCHEMATIC DIAGRAM – MAIN Section (1/7) – • See page 34 for IC Pin Function Description.



5-7. SCHEMATIC DIAGRAM – MAIN Section (2/7) – • See page 30 for IC Block Diagram.

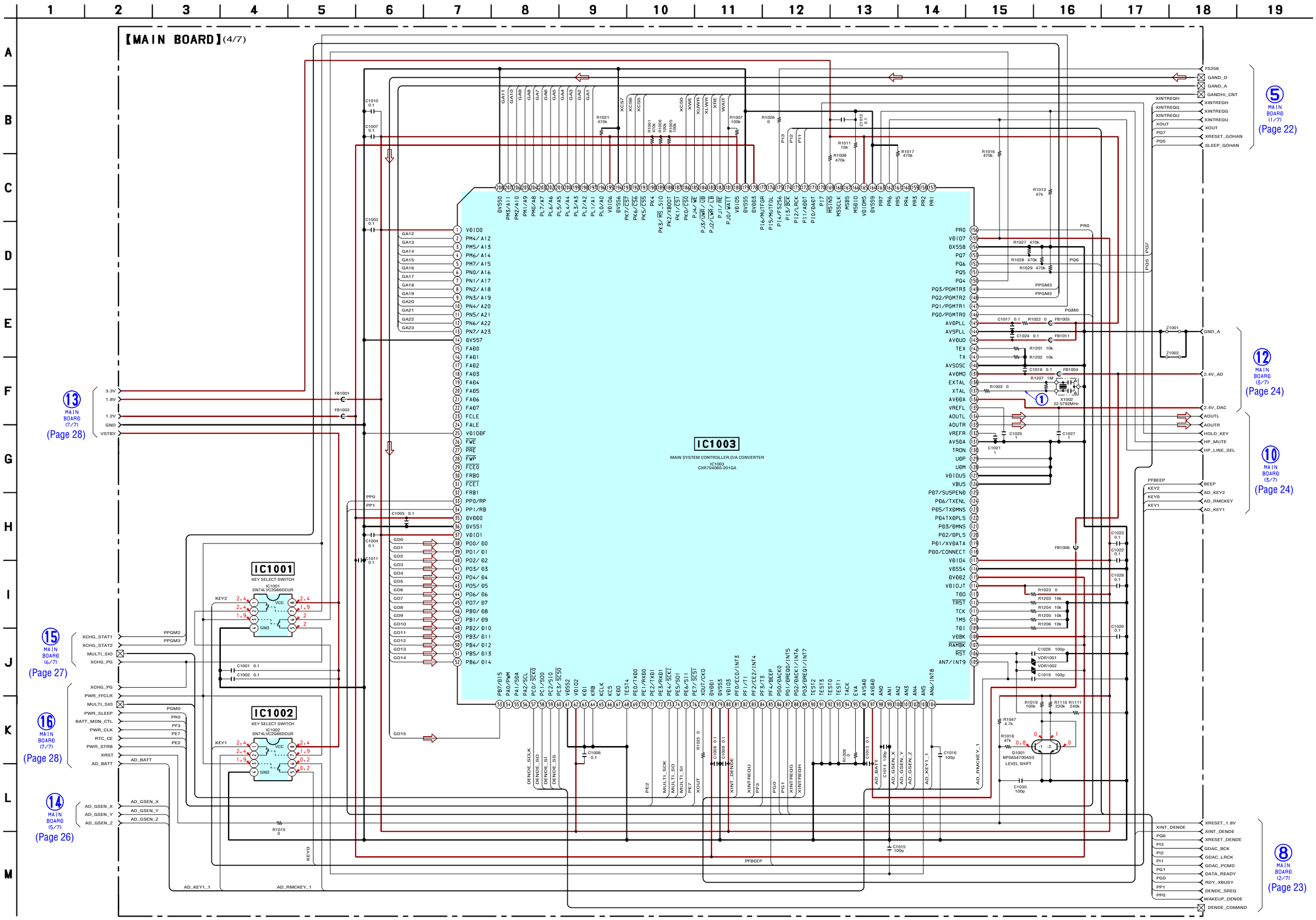


5-8. SCHEMATIC DIAGRAM – MAIN Section (3/7) – • See page 30 for IC Block Diagrams.



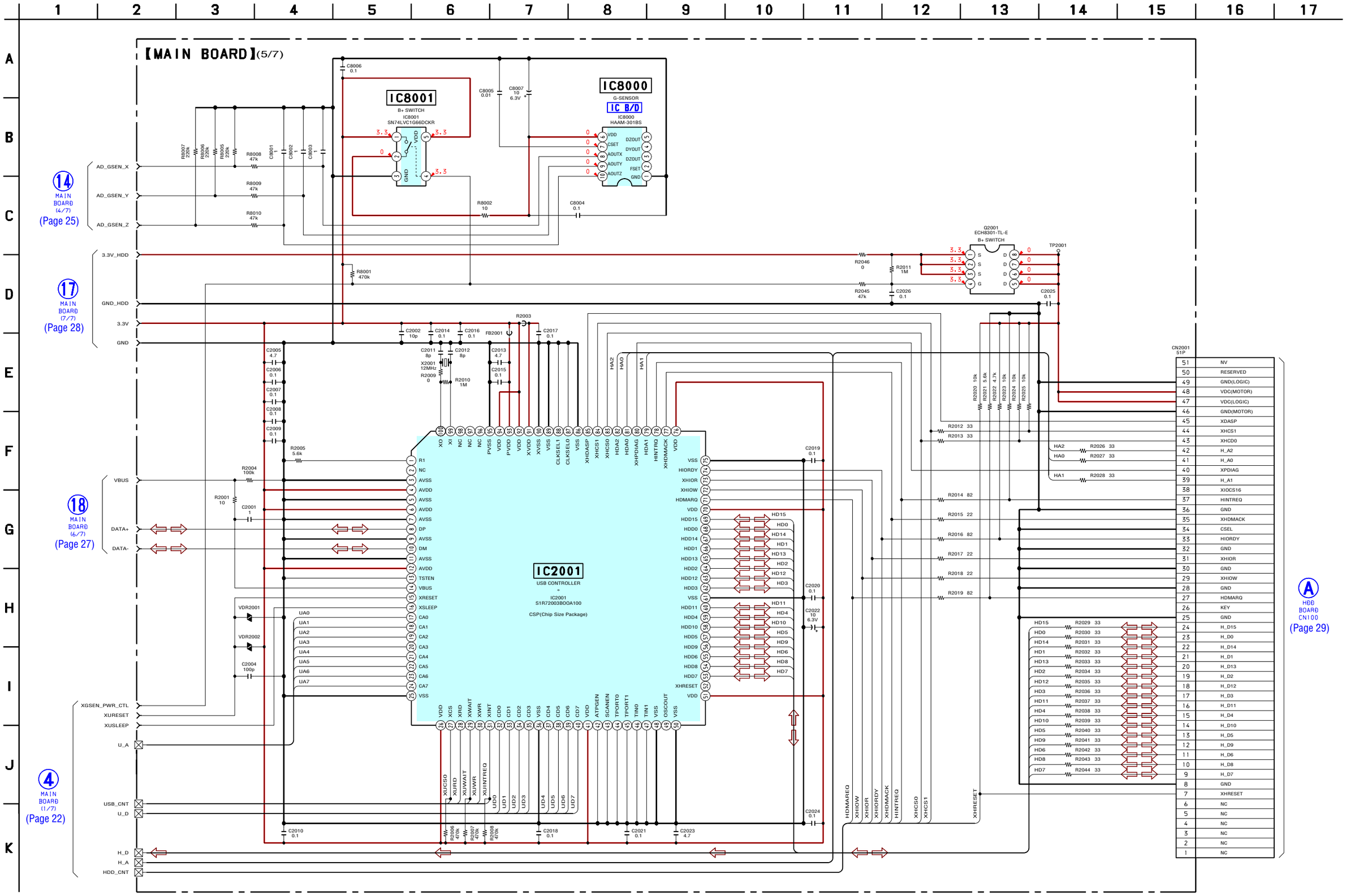
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

5-9. SCHEMATIC DIAGRAM – MAIN Section (4/7) – • See page 19 for Waveform. • See page 34 for IC Pin Function Description.

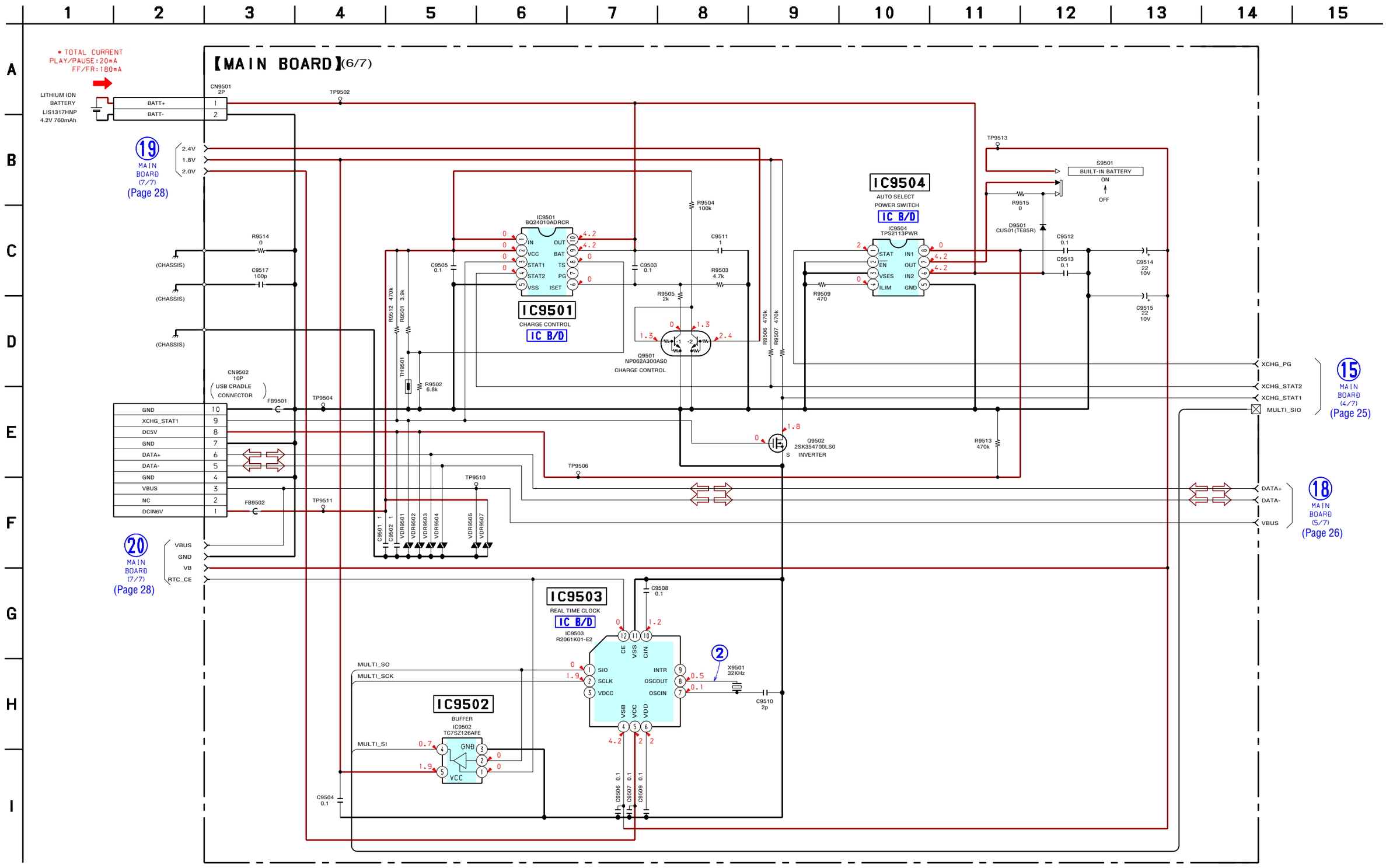


5-10. SCHEMATIC DIAGRAM – MAIN Section (5/7) –

• See page 30 for IC Block Diagram. • See page 34 for IC Pin Function Description.

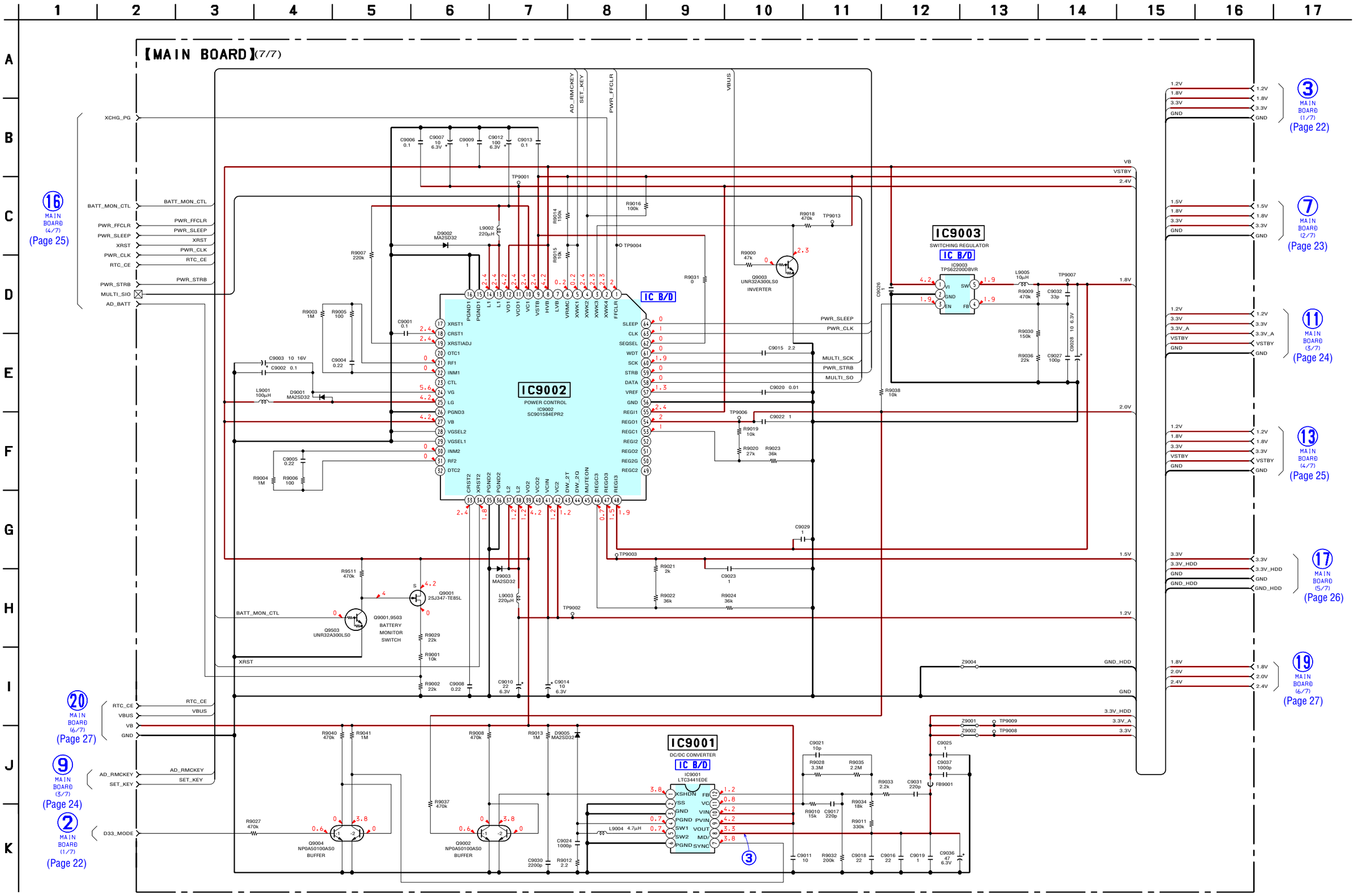


5-11. SCHEMATIC DIAGRAM – MAIN Section (6/7) – • See page 30 for IC Block Diagrams. • See page 19 for Waveform.



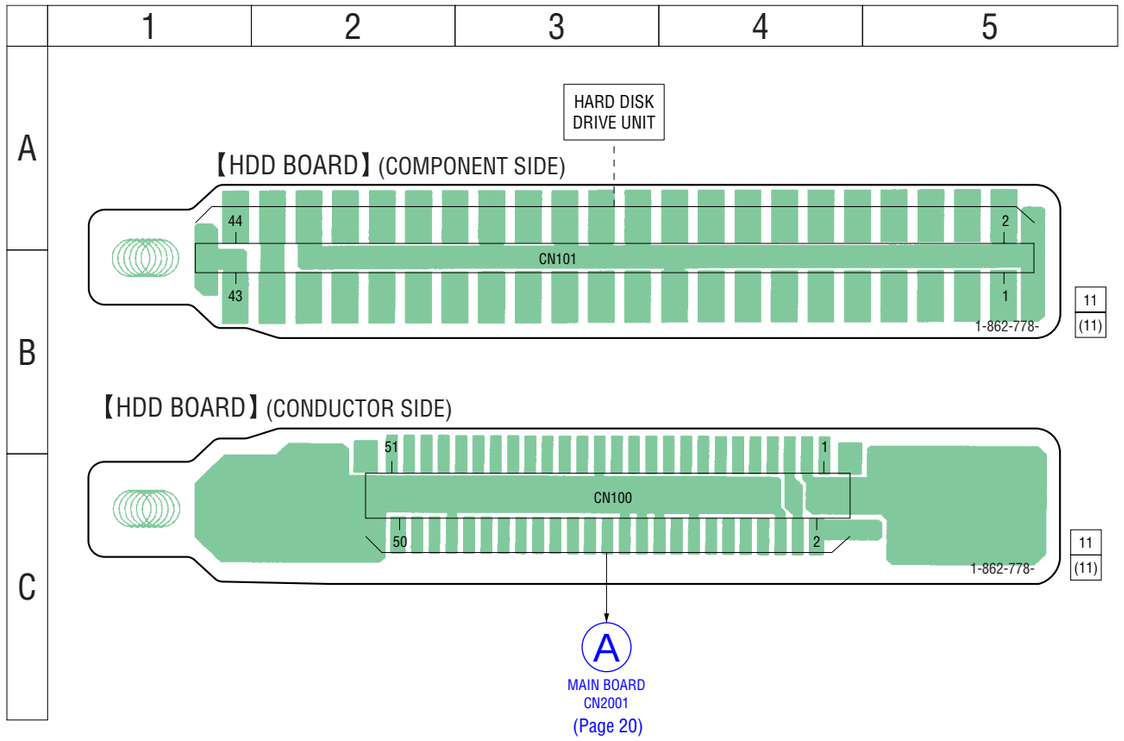
5-12. SCHEMATIC DIAGRAM – MAIN Section (7/7) –

• See page 30 for IC Block Diagrams. • See page 19 for Waveform.

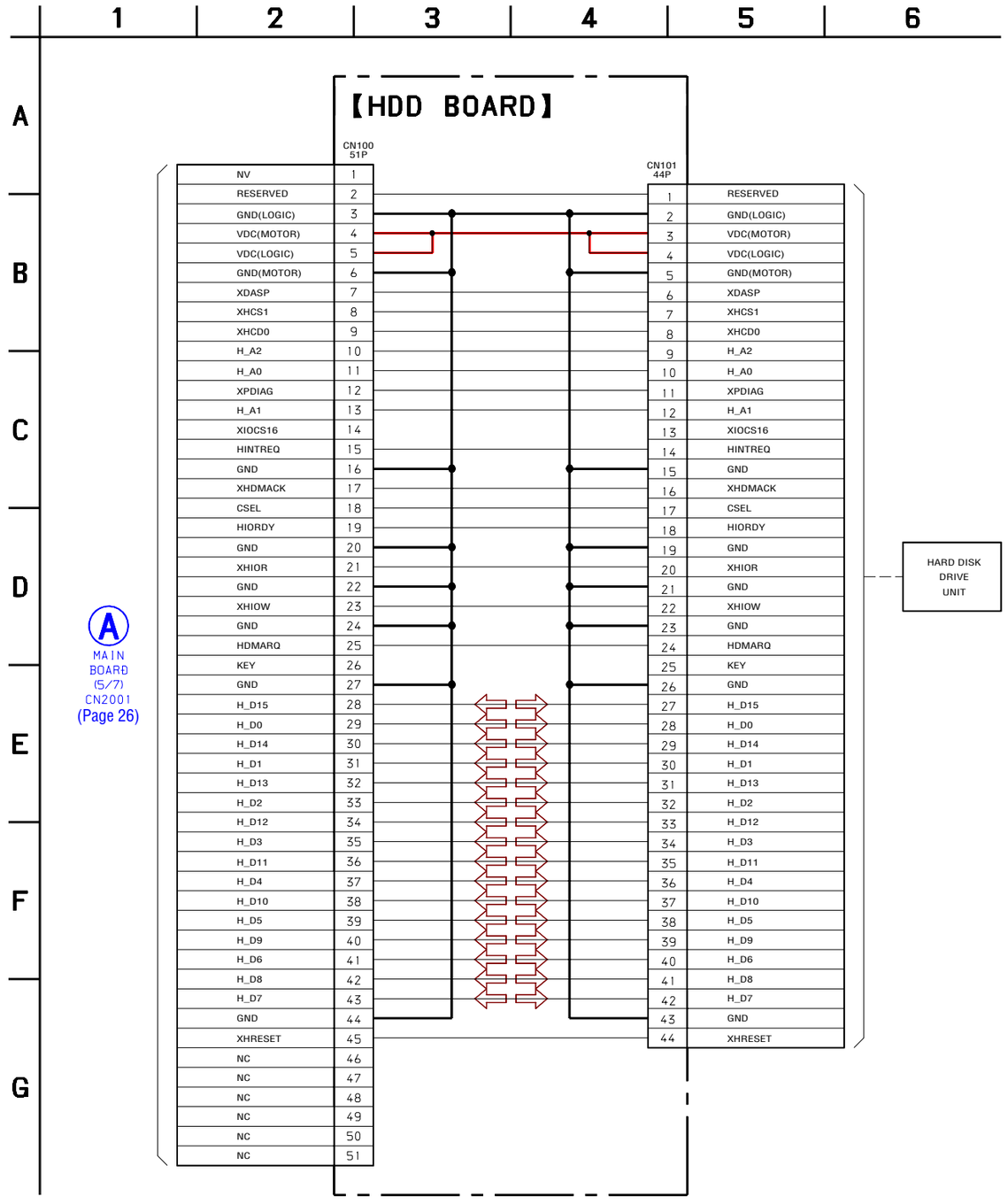


5-13. PRINTED WIRING BOARD – HDD Section –

:Uses unleaded solder.



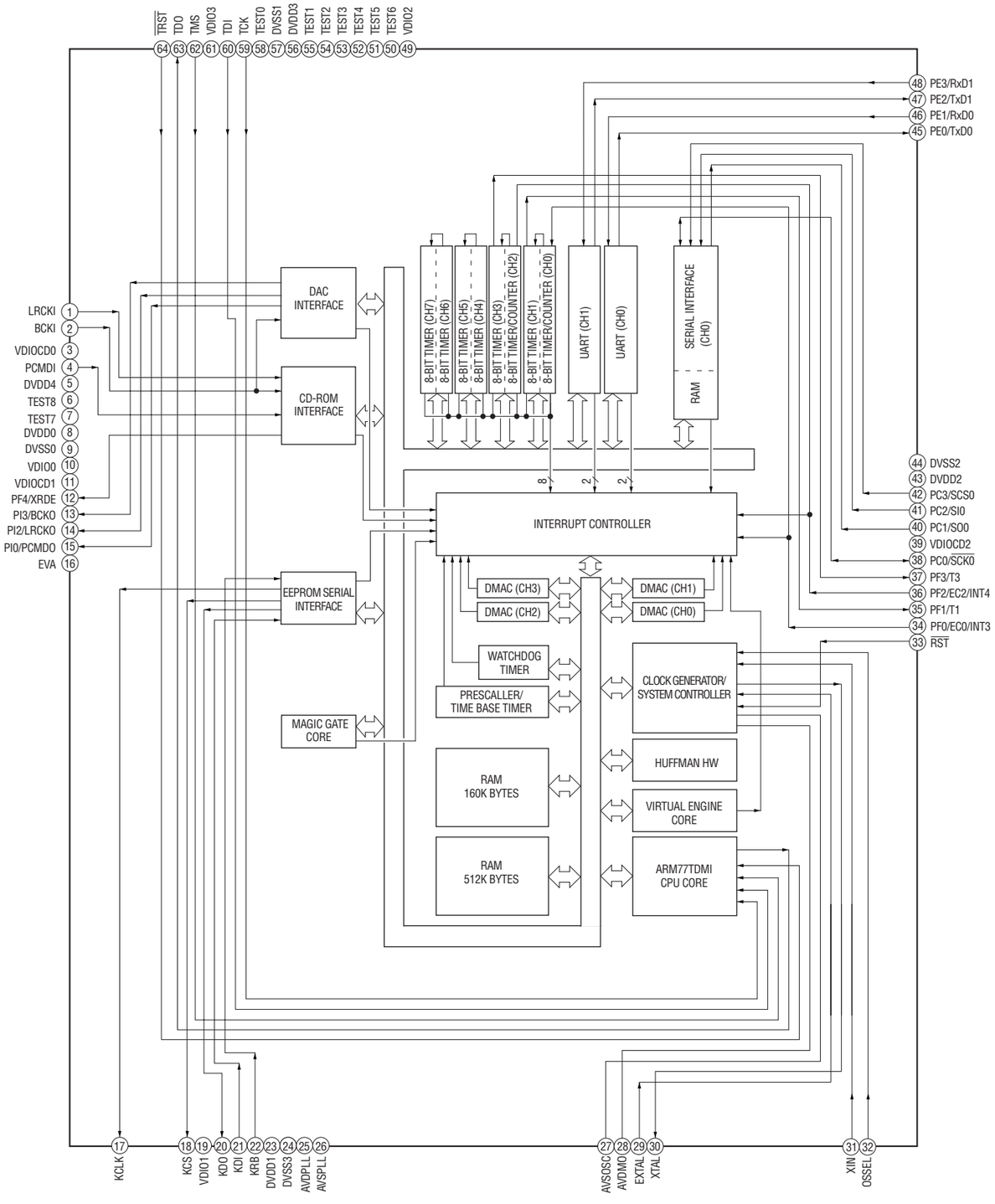
5-14. SCHEMATIC DIAGRAM – HDD Section –



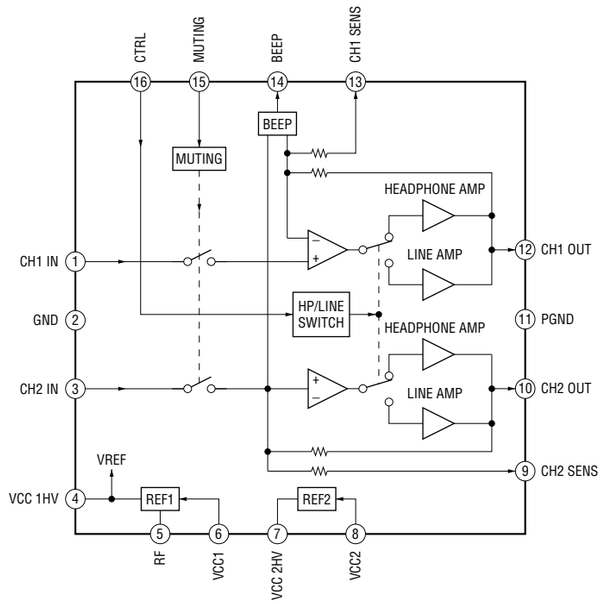
- **IC Block Diagrams**

– MAIN Board –

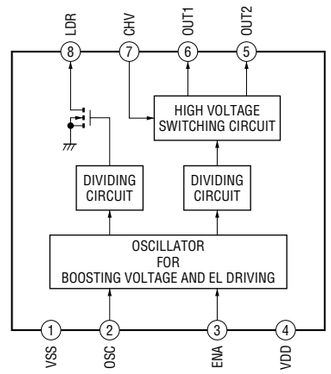
IC3001 CXR710160-211GH



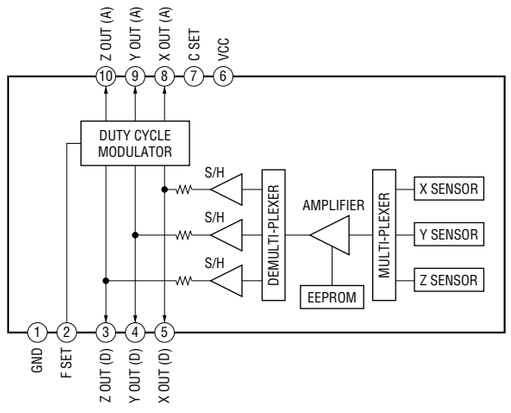
IC4301 AN17020A-VB



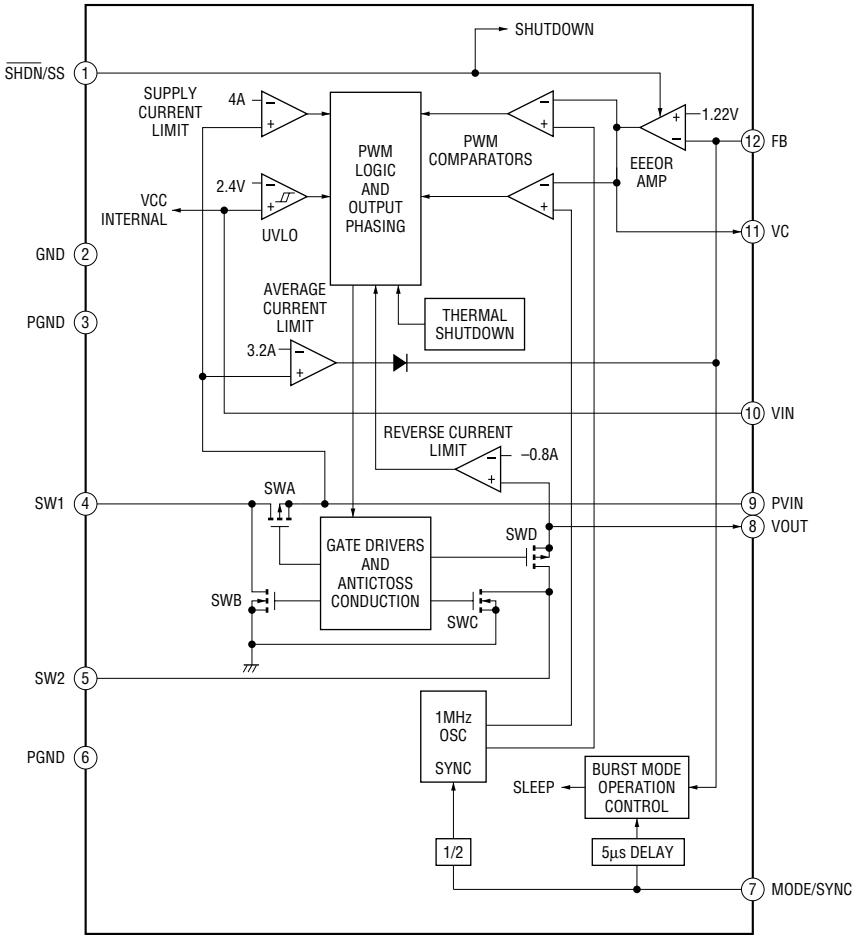
IC5001 SM8142BD-G-EL



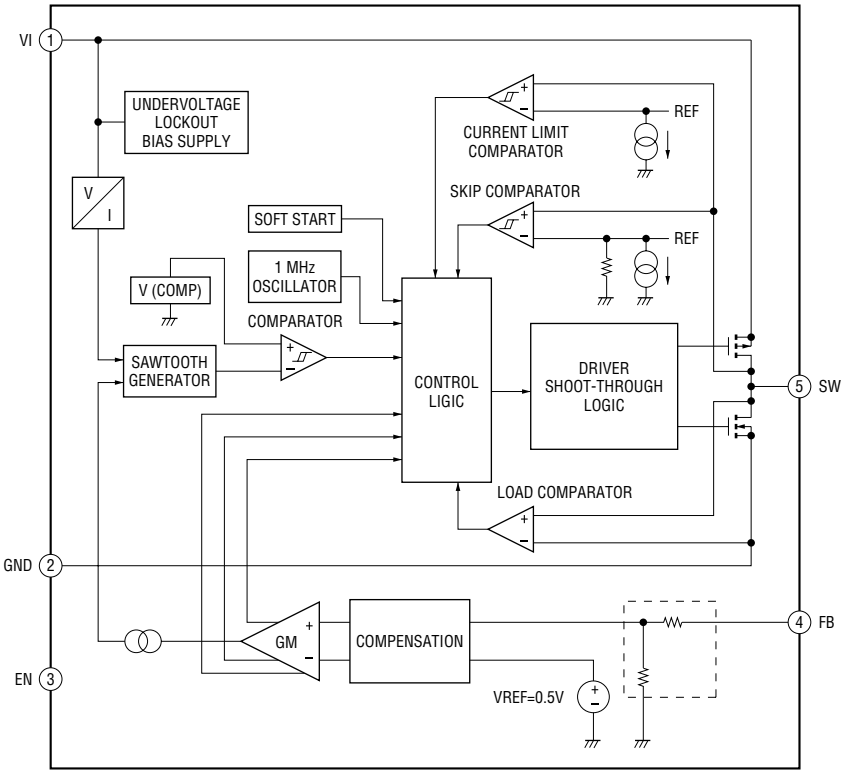
IC8000 HAAM-301BS



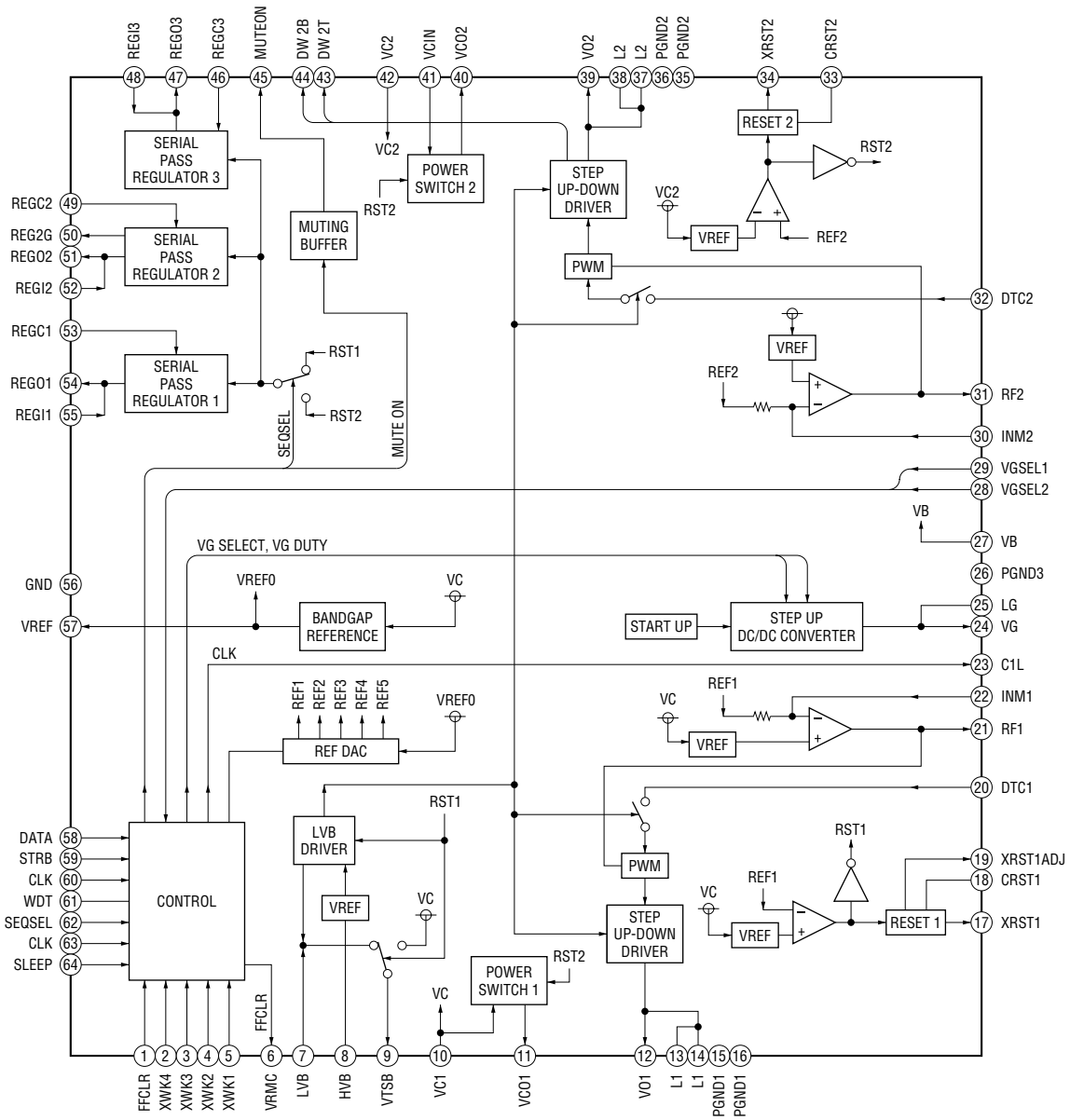
IC9001 LTC3441EDE#TR



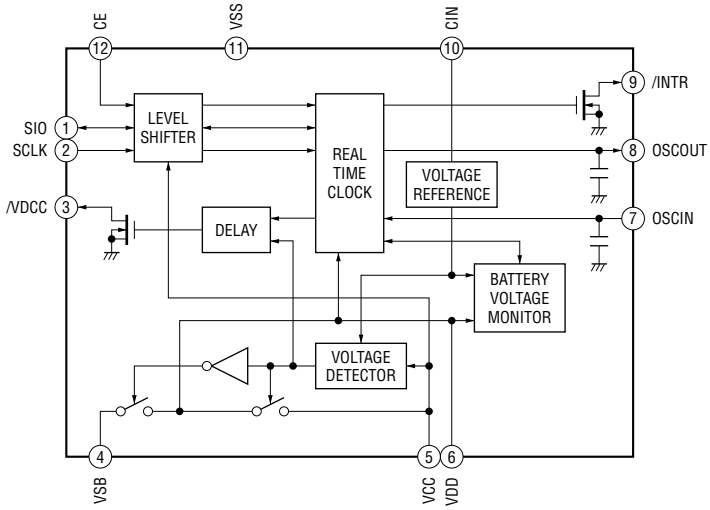
IC9003 TPS62200DBVR



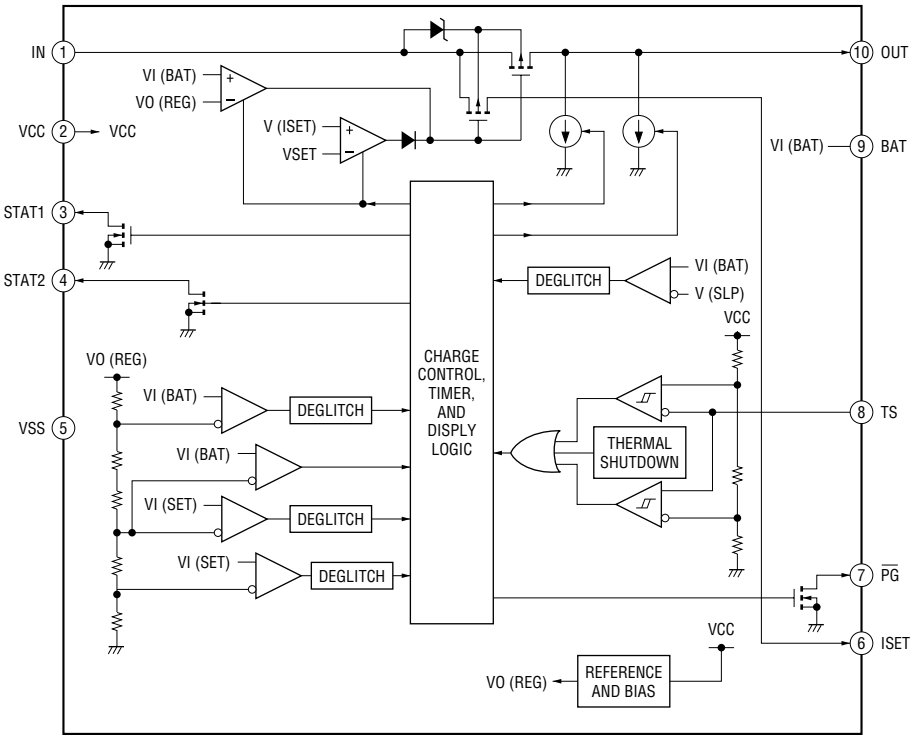
IC9002 SC901584EPR2



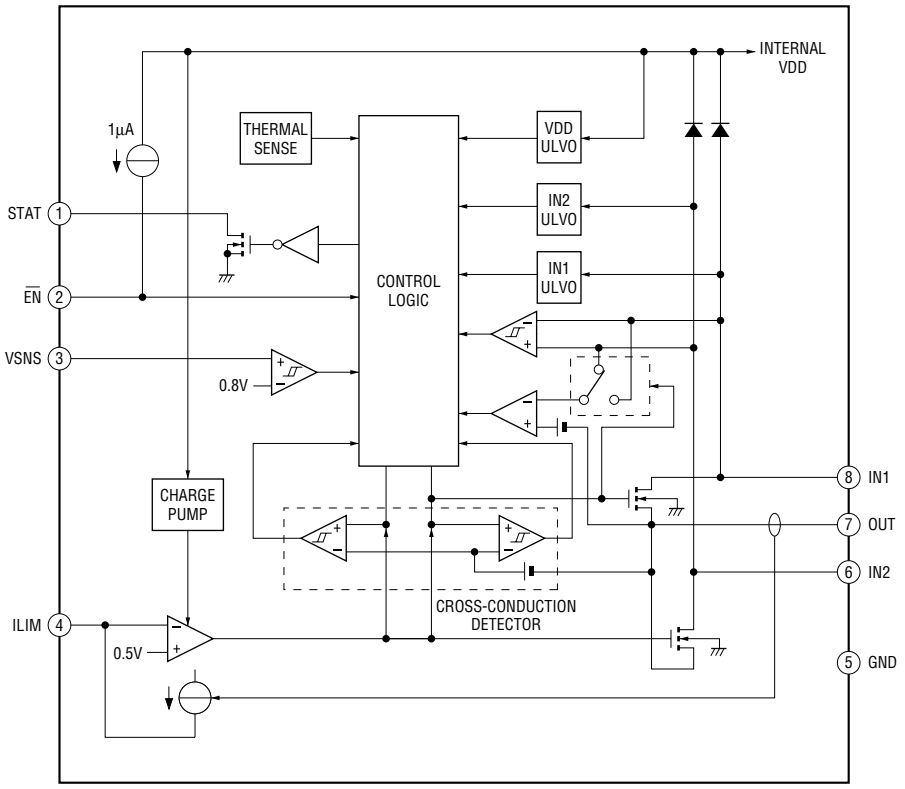
IC9503 R2061K01-E2



IC9501 BQ24010ADRCR



IC9504 TPS2113PWR



- **IC Pin Function Description**

MAIN BOARD IC1003 CXR704060-201GA (SYSTEM CONTROLLER, D/A CONVERTER)

Pin No.	Pin Name	I/O	Description
1	VDIO0	—	Power supply terminal (+1.8V) (for I/O interface)
2 to 10	PM4/A12 to PM7/A15, PN0/A16 to PN4/A20	O	Address signal output to the flash memory and multi interface
11 to 13	PN5/A21 to PN7/A23	O	Address signal output to the multi interface
14	DVSS7	—	Ground terminal
15 to 22	FAD0 to FAD7	I/O	Not used
23	FCLE	O	Not used
24	FALE	O	Not used
25	VDIODF	—	Power supply terminal (for NAND flash memory interface) Not used
26	$\overline{\text{FWE}}$	O	Not used
27	$\overline{\text{PRE}}$	O	Not used
28	$\overline{\text{FWP}}$	O	Not used
29	$\overline{\text{FCE0}}$	O	Not used
30	FRB0	I	Not used
31	$\overline{\text{FCE1}}$	O	Not used
32	FRB1	I	Not used
33	PP0/RP	O	Wake up signal output to the sub system controller
34	PP1/RB	O	Communication request signal output to the sub system controller
35	DVDD0	—	Power supply terminal (+1.2V) (for core)
36	DVSS1	—	Ground terminal
37	VDIO1	—	Power supply terminal (+1.8V) (for I/O interface)
38 to 53	PO0/D0 to PO7/D7, PB0/D8 to PB7/D15	I/O	Two-way data bus with the flash memory and multi interface
54	PA0/PWM	O	Not used
55	PA1/SDA	O	Not used
56	PA2/SCL	O	Not used
57	PC0/$\overline{\text{SCK0}}$	I	Serial clock signal input from the sub system controller
58	PC1/SO0	O	Serial data output to the sub system controller
59	PC2/SI0	I	Serial data input from the sub system controller
60	PC3/$\overline{\text{SCS0}}$	O	Chip select signal output to the sub system controller
61	DVSS2	—	Ground terminal
62	VDIO2	—	Power supply terminal (+1.8V) (for I/O interface)
63	KDI	O	Not used
64	KRB	O	Not used
65	KCLK	O	Not used
66	KCS	O	Not used
67	KDO	O	Not used
68	TEST4	I	Input terminal for the test mode setting
69	PE0/TXD0	O	Data output terminal Not used
70	PE1/RXD0	I	Data input terminal Not used
71	PE2/TXD1	O	Strobe signal output to the power control

Pin No.	Pin Name	I/O	Description
72	PE3/RXD1	I	Data input terminal Not used
73	PE4/$\overline{\text{SCK1}}$	O	Serial clock signal output to the power control and real time clock
74	PE5/SO1	O	Serial data output to the power control and real time clock
75	PE6/SI1	I	Serial data input from the real time clock
76	PE7/$\overline{\text{SCS1}}$	O	Chip enable signal output to the real time clock
77	XOUT/CKO	O	Clock signal (176 kHz) output to the multi interface
78	DVDD1	—	Power supply terminal (+1.2V) (for core)
79	DVSS3	—	Ground terminal
80	VDIO3	—	Power supply terminal (+1.8V) (for I/O interface)
81	PF0/EC0/INT3	I	Interrupt request signal input from the sub system controller
82	PF1/T1	O	Shut down signal output to the DC/DC converter
83	PF2/EC2/INT4	I	Interrupt request signal input from the multi interface
84	PF3/T3	O	Clock signal (176 kHz) output to the power control
85	PF4/BEEP	O	Beep signal output to the headphone amplifier
86	PG0/DACK0	I	Ready/busy selection signal input from the flash memory “L”: busy, “H”: ready
87	PG1/DREQ0/INT5	I	Interrupt request signal input from the sub system controller
88	PG2/DACK1/INT6	I	Interrupt request signal input from the multi interface
89	PG3/DREQ1/INT7	I	Interrupt request signal input from the multi interface
90 to 93	TEST2, TEST3, TEST0, TEST1	I	Input terminal for the test mode setting
94	TACK	O	Bus response signal output terminal Not used
95	EVA	I	EVA mode selection signal input terminal Not used
96	AVSAD	—	Ground terminal (for A/D converter)
97	AVDAD	—	Power supply terminal (+2.4V) (for A/D converter)
98	AN0	I	Battery voltage monitor input terminal (A/D input)
99	AN1	I	Not used
100	AN2	I	Acceleration detection signal of X shaft direction input from the acceleration sensor
101	AN3	I	Acceleration detection signal of Y shaft direction input from the acceleration sensor
102	AN4	I	Acceleration detection signal of Z shaft direction input from the acceleration sensor
103, 104	AN5, AN6/INT8	I	Set key input terminal (A/D input)
105	AN7/INT9	I	Remote commander key input terminal (A/D input)
106	$\overline{\text{RST}}$	I	Reset signal input from the power control
107	$\overline{\text{RAMBK}}$	I	RAM back up control signal input terminal Not used
108	VDBK	—	Power supply terminal (+1.2V) (for RAM back up)
109	TDI	I	Data input terminal (for JTAG) Not used
110	TMS	I	Test mode control signal input terminal (for JTAG) Not used
111	TCK	I	Clock signal input terminal (for JTAG) Not used
112	TRST	I	Reset signal input terminal (for JTAG) Not used
113	TDO	O	Data output terminal (for JTAG) Not used
114	VDIOJT	—	Power supply terminal (+1.8V) (for JTAG)
115	DVDD2	—	Power supply terminal (+1.2V) (for core)
116	DVSS4	—	Ground terminal
117	VDIO4	—	Power supply terminal (+1.8V) (for I/O interface)
118	PD0/CONNECT	O	Test terminal for debug Not used
119	PD1/XVDATA	O	Test terminal for debug Not used

Pin No.	Pin Name	I/O	Description
120	PD2/DPLS	O	Test terminal for debug Not used
121	PD3/DMNS	O	Test terminal for debug Not used
122	PD4/TXDPLS	O	Test terminal for debug Not used
123	PD5/TXDMNS	O	Test terminal for debug Not used
124	PD6/TXENL	O	Test terminal for debug Not used
125	PD7/SUSPEND	O	Test terminal for debug Not used
126	VBUS	I	Not used
127	VDIOUS	—	Power supply terminal (for USB transceiver) Not used
128	UDM	I/O	Not used
129	UDP	I/O	Not used
130	TRON	O	Not used
131	AVSDA	—	Ground terminal (for internal D/A converter)
132	VREFER	O	Reference voltage output terminal (R-ch)
133	AOUTR	O	Analog audio signal output to the headphone amplifier (R-ch)
134	AOUTL	O	Analog audio signal output to the headphone amplifier (L-ch)
135	VREFL	O	Reference voltage output terminal (L-ch)
136	AVDDA	—	Power supply terminal (+2.4V) (for internal D/A converter)
137	XTAL	O	Main system clock output terminal (22.5792 MHz)
138	EXTAL	I	Main system clock input terminal (22.5792 MHz)
139	AVDMO	—	Power supply terminal (+2.4V) (for main system clock oscillator)
140	AVSOSC	—	Ground terminal (for main and sub system clock oscillator)
141	TX	O	Sub system clock output terminal (16 MHz)
142	ETX	I	Sub system clock input terminal (16 MHz)
143	AVDUO	—	Power supply terminal (+2.4V) (for sub system clock oscillator)
144	AVSPLL	—	Ground terminal (for PLL)
145	AVDPLL	—	Power supply terminal (+3.3V) (for PLL analog system)
146	PQ0/PGMTR0	O	Sleep signal output to the power control
147	PQ1/PGMTR1	O	Starting factor clear signal output to the power control
148	PQ2/PGMTR2	I	Charge progress signal input from the charge control
149	PQ3/PGMTR3	I	Charge completion signal input from the charge control
150	PQ4	I	Power good signal input from the power switch
151	PQ5	O	Sleep signal output to the multi interface
152	PQ6	O	Reset signal output to the sub system controller
153	PQ7	O	Reset signal output to the multi interface
154	DVSS8	—	Ground terminal
155	VDIO7	—	Power supply terminal (+1.8V) (for I/O interface)
156	PR0	O	Battery voltage monitor on/off control signal output terminal
157 to 161	PR1 to PR5	—	Not used
162	PR6	O	Headphone/line selection signal output to the headphone amplifier
163	PR7	O	Muting on/off control signal output to the headphone amplifier
164	DVSS9	—	Ground terminal
165	VDIOMS	—	Power supply terminal (+3.3V) (for memory stick interface) Not used
166	MSDIO	I/O	Two-way data bus with the memory stick interface Not used
167	MSBS	O	Bus state signal output to the memory stick interface Not used
168	MSSCLK	O	Clock signal output to the memory stick interface Not used

Pin No.	Pin Name	I/O	Description
169	$\overline{\text{MSINS}}$	I	Card detection signal input from the memory stick interface Not used
170	P17	I	HOLD key detection signal input terminal "L": hold
171	P10/DADT	O	Audio data input from the memory stick interface Not used
172	P11/ADDT	I	Audio data input from the sub system controller
173	P12/LRCK	I	L/R sampling clock signal input from the sub system controller
174	P13/$\overline{\text{BCK}}$	I	Bit clock signal input from the sub system controller
175	P14/FS256	O	Clock signal (11.2896 MHz) output to the multi interface
176	P15/MUTFGL	O	Not used
177	P15/MUTFGR	O	Not used
178	DVDD3	—	Power supply terminal (+1.2V) (for core)
179	DVSS5	—	Ground terminal
180	VDIO5	—	Power supply terminal (+1.8V) (for I/O interface)
181	PJ0/$\overline{\text{WAIT}}$	I	Wait signal input from the multi interface
182	PJ1/$\overline{\text{RE}}$	O	Read signal output to the multi interface
183	PJ2/$\overline{\text{LWR}}$/$\overline{\text{LB}}$	O	Write strobe signal output to the multi interface (lower byte)
184	PJ3/$\overline{\text{UWR}}$/$\overline{\text{UB}}$	O	Write strobe signal output to the multi interface (upper byte)
185	PJ4/$\overline{\text{WE}}$	O	Write signal output to the multi interface
186	PK0/$\overline{\text{CS0}}$	O	Chip select signal output to the multi interface
187	PK1/$\overline{\text{CS1}}$	O	Chip select signal output terminal Not used
188	PK2/XBOOT	I	Boot mode selection signal input terminal Not used
189	PK3/$\overline{\text{MS}}$_SIO	I	Boot mode selection signal input terminal Not used
190	PK4	I	Not used
191	PK5/$\overline{\text{CS5}}$	I	Chip select signal input from the multi interface
192	PK6/$\overline{\text{CS6}}$	I	Chip select signal input from the multi interface
193	PK7/$\overline{\text{CS7}}$	I	Chip select signal input from the multi interface
194	DVSS6	—	Ground terminal
195	VDIO6	—	Power supply terminal (+1.8V) (for I/O interface)
196 to 207	PL0/A0 to PL7/A7, PM0/A8 to PM3/A11	O	Address signal output to the flash memry and mullet interface
208	DVSS6	—	Ground terminal

MAIN BOARD IC2001 1S1R72003BOOA100 (USB CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	R1	I/O	Internal operation setting terminal
2	N.C.	—	Not used
3	AVSS	—	Ground terminal (analog system)
4	AVDD	—	Power supply terminal (+3.3V) (analog system)
5	AVSS	—	Ground terminal (analog system)
6	AVDD	—	Power supply terminal (+3.3V) (analog system)
7	AVSS	—	Ground terminal (analog system)
8	DP	I/O	USB data (+) input/output terminal
9	AVSS	—	Ground terminal (analog system)
10	DM	I/O	USB data (–) input/output terminal
11	AVSS	—	Ground terminal (analog system)
12	AVDD	—	Power supply terminal (+3.3V) (analog system)
13	TSTEN	I	Input terminal for the test mode setting
14	VBUS	I	USB bus detection signal input terminal
15	XRESET	I	Reset signal input from the multi interface
16	XSLEEP	I	Sleep signal input from the multi interface
17 to 24	CA0 to CA7	I	Address signal input from the multi interface
25	VSS	—	Ground terminal (logic system)
26	VDD	—	Power supply terminal (+3.3V) (logic system)
27	XCS	I	Chip select signal input from the multi interface
28	XRD	I	Read signal input from the multi interface
29	XWAIT	O	Wait signal output to the multi interface
30	XWR	I	Write signal input from the multi interface
31	XINT	O	Interrupt request signal output to the multi interface
32 to 35	CD0 to CD3	I/O	Two-way data bus with the multi interface and liquid crystal display unit
36	VSS	—	Ground terminal (logic system)
37 to 40	CD4 to CD7	I/O	Two-way data bus with the multi interface and liquid crystal display unit
41	VDD	—	Power supply terminal (+3.3V) (logic system)
42	ATPGEN	I	Input terminal for the test mode setting
43	SCANEN	I	Input terminal for the test mode setting
44, 45	TPORT0, TPORT1	I/O	Input/output terminal for the test mode setting
46, 47	TIN0, TIN1	I	Input terminal for the test mode setting
48	VSS	—	Ground terminal (logic system)
49	OSCOUT	O	Clock signal output terminal Not used
50	VSS	—	Ground terminal (logic system)
51	VDD	—	Power supply terminal (+3.3V) (logic system)
52	XHRESET	I	Reset signal input terminal Not used
53 to 60	HDD4 to HDD11	I/O	Two-way data bus with the multi interface and hard disk drive unit
61	VSS	—	Ground terminal (logic system)
62 to 69	HDD0 to HDD3, HDD12 to HDD15	I/O	Two-way data bus with the multi interface and hard disk drive unit
70	VDD	—	Power supply terminal (+3.3V) (logic system)
71	HDMARQ	I	DMA request signal input from the hard disk drive unit
72	XHIOW	O	Write signal output to the hard disk drive unit
73	XHIOR	O	Read signal output to the hard disk drive unit

Pin No.	Pin Name	I/O	Description
74	HIORDY	I	Wait signal input from the hard disk drive unit
75	VSS	—	Ground terminal (logic system)
76	VDD	—	Power supply terminal (+3.3V) (logic system)
77	XHDMACK	O	DMA acknowledge signal output to the hard disk drive unit
78	HINTRQ	I	Interrupt request signal input from the hard disk drive unit
79	HA1	O	Address signal output to the multi interface and hard disk drive unit
80	XHPDIAG	I	Diagnosis sequence compression signal input from the hard disk drive unit
81, 82	HA0, HA2	O	Address signal output to the multi interface and hard disk drive unit
83, 84	HCS0, HCS1	O	Chip select signal output to the hard disk drive unit
85	XHDASP	I	Drive valid signal and slave drive detection signal input from the hard disk drive unit
86	VSS	—	Ground terminal (logic system)
87, 88	CLKSEL0, CLKSEL1	I	Input terminal for oscillation frequency setting Fixed at 12 MHz in this set
89	VSS	—	Ground terminal (logic system)
90	XVSS	—	Ground terminal (logic system)
91	XVDD	—	Power supply terminal (+3.3V) (logic system)
92	VDD	—	Power supply terminal (+3.3V) (logic system)
93	PVDD	—	Power supply terminal (+3.3V) (for PLL)
94	VDD	—	Power supply terminal (+3.3V) (logic system)
95	PVSS	—	Ground terminal (for PLL)
96 to 98	NC	—	Not used
99	XI	I	Sub system clock input terminal (12MHz)
100	XO	O	Sub system clock output terminal (12MHz)

MAIN BOARD IC7001 CXD1616GH (MULTI INTERFACE)

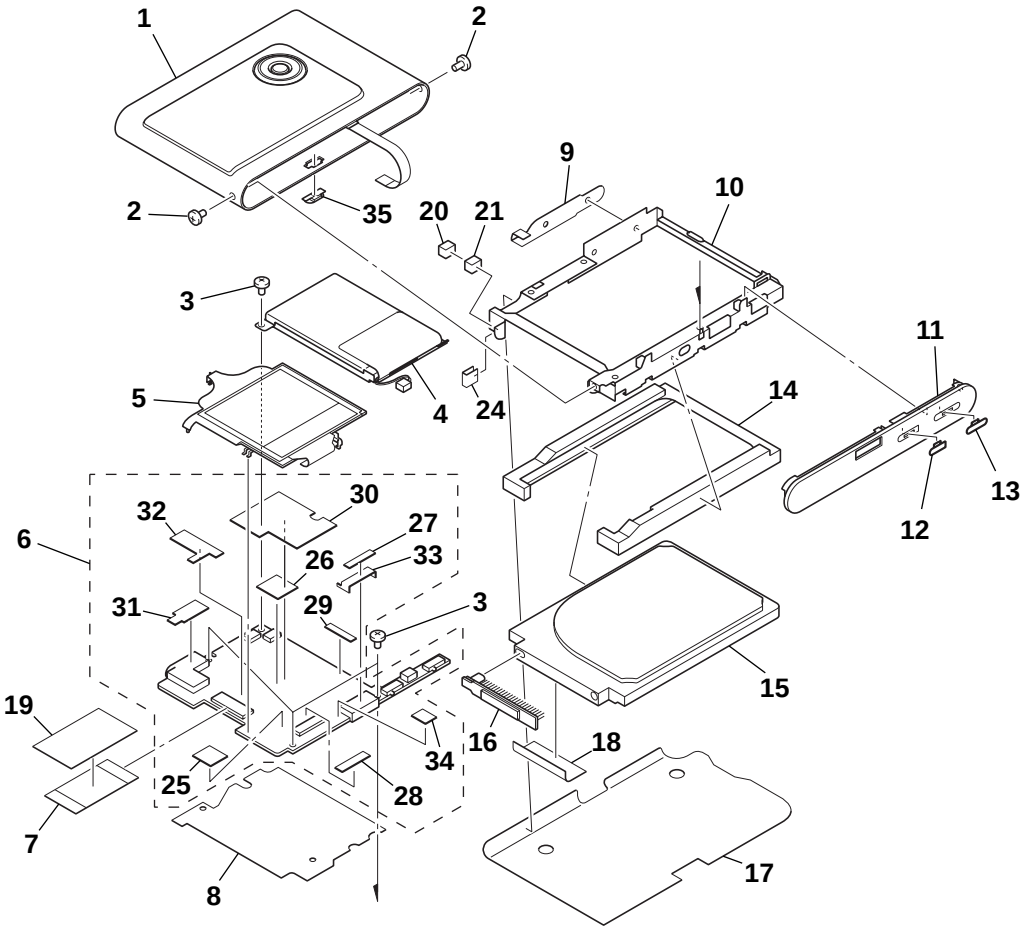
Pin No.	Pin Name	I/O	Description
1	XTAL	I	Sub system clock input terminal Not used
2	EXTAL	O	Sub system clock output terminal Not used
3	CLK2550A	O	Clock signal (22.5792 MHz) output to the sub system controller
4	CLK2550X	O	Clock signal (22.5792 MHz) inversion output to the sub system controller
5	XOSCSTP	I	Oscillation stop signal input terminal Not used
6	XRESET	I	Reset signal input from the main system controller
7	EXCLKIN	I	Clock signal (176 kHz) input from the main system controller
8 to 30	A1 to A23	I	Address signal input from the main system controller
31 to 46	D0 to D15	I/O	Two-way data bus with the main system controller and flash memory
47 to 49	XCS1 to XCS3	I	Chip select signal input from the main system controller
50	XRD	I	Read signal input from the main system controller
51	XWR	I	Write signal input from the main system controller
52	XLB	I	Write strobe signal input from the main system controller (lower byte)
53	XUB	I	Write strobe signal input from the main system controller (upper byte)
54	XWAIT	I	Wait signal input from the main system controller
55, 56	NC	—	Not used
57	XINTREQG	O	Interrupt request signal output to the main system controller
58	XINTREQH	O	Interrupt request signal output to the main system controller
59	XINTREQU	O	Interrupt request signal output to the main system controller
60 to 72	SA0 to SA12	O	Address signal output to the SD-RAM
73, 74	BA0, BA1	O	Bank selection address signal output to the SD-RAM
75 to 90	SD0 to SD15	I/O	Two-way data bus with the SD-RAM
91	XSCS	O	Chip select signal output to the SD-RAM
92	XRAS	O	Row address strobe signal output to the SD-RAM
93	XCAS	O	Column address strobe signal output to the SD-RAM
94	XSWE	O	Write enable signal output to the SD-RAM
95	LDQM	O	I/O mask signal output to the SD-RAM (lower byte)
96	UDQM	O	I/O mask signal output to the SD-RAM (upper byte)
97	SDCLK	O	Clock signal output to the SD-RAM
98	SDCKE	O	Clock enable signal output to the SD-RAM
99	UA0	O	Address signal output to the USB controller and liquid crystal display unit
100 to 106	UA1 to UA7	O	Address signal output to the USB controller
107 to 114	UD0 to UD7	I/O	Two-way data bus with the USB controller and liquid crystal display unit
115	XUCS0	O	Chip select signal output to the USB controller
116	XUCS1	O	Chip select signal output to the liquid crystal display unit
117	XURD	O	Read signal output to the USB controller and liquid crystal display unit
118	XUWR	O	Write signal output to the USB controller and liquid crystal display unit
119	XUWAIT	I	Wait signal output to the USB controller
120	XUINTREQ	I	Interrupt request signal output to the USB controller
121 to 123	HA0 to HA2	I	Address signal input from the USB controller
124 to 139	HD0 to HD15	I/O	Two-way data bus with the USB controller and hard disk drive unit
140, 141	XHCS0, XHCS1	O	Chip select signal output to the hard disk drive unit
142	XHIOR	O	Read signal output to the hard disk drive unit
143	XHIOW	O	Write signal output to the hard disk drive unit

Pin No.	Pin Name	I/O	Description
144	HIORDY	I	Wait signal input from the hard disk drive unit
145	XHDMACK	O	DMA acknowledge signal output to the hard disk drive unit
146	HDMARQ	I	DMA request signal input from the hard disk drive unit
147	HINTREQ	I	Interrupt request signal input from the hard disk drive unit
148	XHRESET	O	Reset signal output to the hard disk drive unit
149	LRCK	O	L/R sampling clock signal output to the sub system controller
150	BCK	O	Bit clock signal output to the sub system controller
151	DATA	O	Transmission data output to the sub system controller
152	XRDE	O	Transmission enabling signal output to the sub system controller
153	FS256	I	Clock signal (11.2896 MHz) input from the main system controller
154	DTCK	I/O	Two-way TSB communication data bus with the remote commander
155	URESET	O	Reset signal output to the USB controller
156	USLEEP	O	Sleep signal output to the USB controller
157	HDD_PWR_CTL	O	Power supply on/off control signal output terminal for hard disk drive unit Not used
158	GSEN_PWR_CTL	O	Power supply on/off control signal output terminal for acceleration sensor
159	BACKLIT_PWR	O	Power supply on/off control signal output terminal for liquid crystal display back light
160	D33_MODE	O	Power supply on/off control signal output to the DC/DC converter for +3.3V power supply
161	RESET_LCD	O	Reset signal output to the liquid crystal display unit
162	XEL_PWR_CTL	I/O	Not used
163	GPIO8	I/O	Not used
164	SYNCMODE	I	Sync/non-sync mode selection signal input terminal Not used
165	TDI	I	Data input terminal (for JTAG) Not used
166	TMS	I	Test mode control signal input terminal (for JTAG) Not used
167	TCK	I	Clock signal input terminal (for JTAG) Not used
168	TRST	I	Reset signal input terminal (for JTAG) Not used
169	TDO	O	Data output terminal (for JTAG) Not used
170 to 172	TEST0 to TEST2	I	Input terminal for the test mode setting
173	XICKSTP	I	Sleep signal input from the main system controller
174	NC	—	Not used
175 to 190	VDE33	—	Power supply terminal (+1.2V)
191 to 200	VDE33	—	Power supply terminal (+1.8V)
201 to 206	VDE33	—	Power supply terminal (+3.3V)
207 to 223	GND	—	Ground terminal
224 to 228	NC	—	Not used

SECTION 6
EXPLODED VIEW

NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories are given in the last of the electrical parts list.



Ref. No.	Part No.	Description	Remark
1	X-2022-998-1	CABINET (UPPER) (S) SUB ASSY (SILVER) (France, UK)	
1	X-2022-999-1	CABINET (UPPER) (B) SUB ASSY (BLACK) (France, UK)	
1	X-2023-000-1	CABINET (UPPER) (S) SUB ASSY (SILVER) (US, Canadian)	
1	X-2023-001-1	CABINET (UPPER) (B) SUB ASSY (BLACK) (US, Canadian)	
2	3-234-449-09	SCREW (M1.4) (for BLACK)	
2	3-234-449-11	SCREW (M1.4) (for SILVER)	
3	3-238-876-04	SCREW (M1.4), TOOTHED LOCK	
4	X-2023-758-1	BATTERY BLOCK SUB ASSY (US, Canadian)	
4	X-2023-759-1	BATTERY BLOCK SUB ASSY (France, UK)	
5	X-2023-003-1	LCD BLOCK SUB ASSY	
6	X-2023-004-1	MAIN BOARD, COMPLETE (for SERVICE)	
7	1-863-393-11	FLEXIBLE BOARD	
8	2-102-757-01	INSULATING (PC BOARD)	
9	1-478-820-11	SWITCH UNIT (H)	
10	X-2022-217-1	BRACKET (AB) ASSY	
11	2-102-782-01	CABINET (LOWER) (BLACK)	
11	2-102-782-11	CABINET (LOWER) (SILVER)	
12	2-102-768-01	KNOB (BATT)	
13	2-102-769-01	KNOB (HOLD)	

Ref. No.	Part No.	Description	Remark
14	2-102-761-01	INSULATOR	
15	1-478-858-11	HDD UNIT	
16	A-1063-220-A	HDD BOARD, COMPLETE	
17	2-102-759-01	SHEET (DAMPER)	
18	2-148-643-01	SHEET (SHIELD HDD)	
19	2-148-885-01	SHEET (INSULATING HDD FLEXIBLE)	
20	2-149-476-01	SPACER (CABINET LOWER)	
21	2-149-476-11	SPACER (CABINET LOWER)	
24	2-187-212-01	SHEET (BRACKET B)	
25	2-178-122-01	SPACER E	
26	2-178-123-01	SPACER F	
27	2-178-124-02	SPACER G	
28	2-178-125-01	SPACER H	
29	2-178-126-01	SPACER I	
30	2-178-127-02	SPACER J	
31	2-178-527-01	SHEET (HP)	
32	2-186-926-02	SHEET (SHIELD IC)	
33	2-186-925-01	SHEET (SHIELD USB)	
34	2-318-882-01	SHEET (USB HORIZONTAL)	
35	2-102-781-01	ESCUTCHEON (CRADLE) (SILVER)	
35	2-102-781-11	ESCUTCHEON (CRADLE) (BLACK)	

SECTION 7
ELECTRICAL PARTS LIST

HDD | MAIN

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA... : µA... uPA... : µPA...
  uPB... : µPB... uPC... : µPC...
  uPD... : µPD...
- CAPACITORS
  uF: µF
- COILS
  uH: µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-1063-220-A	HDD BOARD, COMPLETE			
		**********			
		< CONNECTOR >			
CN100	1-818-601-11	CONNECTOR, FPC (ZIF) 51P			
**********					
	X-2023-004-1	MAIN BOARD, COMPLETE (for service)			
		**********			
	2-178-122-01	SPACER E			
	2-178-123-01	SPACER F			
	2-178-124-01	SPACER G			
	2-178-125-01	SPACER H			
	2-178-126-01	SPACER I			
	2-178-127-01	SPACER J			
	2-178-527-01	SHEET (HP)			
	2-186-925-01	SHEET (SHIELD USB)			
	2-186-926-02	SHEET (SHIELD IC)			
	2-318-882-01	SHEET (USB HORIZONTAL)			
		< CAPACITOR >			
C1001	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1002	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1003	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1004	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1005	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1006	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1007	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1008	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1009	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1010	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1011	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1012	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1013	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1014	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C1015	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C1016	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C1017	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1018	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1019	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C1020	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1021	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C1022	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1023	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1024	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1025	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C1026	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C1027	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C1028	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1030	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C1101	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C1103	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2001	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C2002	1-128-604-11	CERAMIC CHIP	10PF	0.5PF	25V
C2004	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C2005	1-100-507-91	CERAMIC CHIP	4.7uF	20%	6.3V
C2006	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2007	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2008	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2009	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2010	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2011	1-127-998-11	CERAMIC CHIP	8PF	0.5PF	25V
C2012	1-127-998-11	CERAMIC CHIP	8PF	0.5PF	25V
C2013	1-100-507-91	CERAMIC CHIP	4.7uF	20%	6.3V
C2014	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2015	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2016	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2017	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2018	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2019	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2020	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2021	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2022	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C2023	1-100-507-91	CERAMIC CHIP	4.7uF	20%	6.3V
C2024	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2025	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2026	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3001	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3002	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C3003	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C3004	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3005	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C3006	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3007	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3008	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3009	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3010	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V

MAIN

Ref. No.	Part No.	Description			Remark
C3011	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3012	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3013	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C3015	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3017	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3018	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C4101	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C4102	1-128-628-11	CERAMIC CHIP	0.0022uF	10%	6.3V
C4103	1-128-625-11	CERAMIC CHIP	470PF	10%	16V
C4104	1-135-868-11	TANTALUM CHIP	220uF	20%	2.5V
C4105	1-113-600-11	TANTALUM CHIP	2.2uF	20%	6.3V
C4106	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C4201	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C4202	1-128-628-11	CERAMIC CHIP	0.0022uF	10%	6.3V
C4203	1-128-625-11	CERAMIC CHIP	470PF	10%	16V
C4204	1-135-868-11	TANTALUM CHIP	220uF	20%	2.5V
C4205	1-113-600-11	TANTALUM CHIP	2.2uF	20%	6.3V
C4206	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C4301	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C4302	1-135-337-11	TANTALUM CHIP	1uF	20%	6.3V
C4303	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C4304	1-127-895-11	TANTALUM CHIP	22uF	20%	4V
C4306	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C4307	1-100-539-11	TANTALUM CHIP	47uF	20%	6.3V
C4308	1-127-895-11	TANTALUM CHIP	22uF	20%	4V
C4309	1-131-862-11	TANTALUM CHIP	47uF	20%	4V
C4313	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C4315	1-128-627-11	CERAMIC CHIP	0.001uF	10%	16V
C4316	1-125-839-11	TANTALUM CHIP	47uF	20%	6.3V
C4317	1-125-839-11	TANTALUM CHIP	47uF	20%	6.3V
C4318	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C4319	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C4320	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C5001	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C5002	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C5003	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C5004	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C5005	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C5006	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C5007	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C5008	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C5009	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C5010	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C5011	1-100-415-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5012	1-100-415-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5013	1-125-827-11	CERAMIC CHIP	1uF	10%	25V
C5014	1-128-627-11	CERAMIC CHIP	0.001uF	10%	16V
C5015	1-100-996-21	CERAMIC CHIP	0.1uF		
C5016	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C5017	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C5018	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C5019	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C5020	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7001	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7002	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7003	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7004	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7005	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7006	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7007	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7008	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7009	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7010	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7011	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C7012	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7013	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7014	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7015	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7016	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7017	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7018	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C8001	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C8002	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C8003	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C8004	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C8005	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C8006	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C8007	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C9001	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9002	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9003	1-100-845-11	TANTALUM CHIP	10uF	20%	16V
C9004	1-165-887-11	CERAMIC CHIP	0.22uF	10%	6.3V
C9005	1-165-887-11	CERAMIC CHIP	0.22uF	10%	6.3V
C9006	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9007	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C9008	1-165-887-11	CERAMIC CHIP	0.22uF	10%	6.3V
C9009	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9010	1-100-786-91	TANTALUM CHIP	22uF	20%	6.3V
C9011	1-100-733-91	CERAMIC CHIP	10uF	20%	6.3V
C9012	1-100-841-11	TANTALUM CHIP	100uF	20%	6.3V
C9013	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9014	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C9015	1-165-884-11	CERAMIC CHIP	2.2uF	10%	6.3V
C9016	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C9017	1-128-623-11	CERAMIC CHIP	220PF	10%	16V
C9018	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C9019	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9020	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C9021	1-128-604-11	CERAMIC CHIP	10PF	0.5PF	25V
C9022	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9023	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9024	1-128-627-11	CERAMIC CHIP	0.001uF	10%	16V
C9025	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9026	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9027	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C9028	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C9029	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9030	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C9031	1-128-623-11	CERAMIC CHIP	220PF	10%	16V
C9032	1-128-611-11	CERAMIC CHIP	33PF	5%	25V
C9036	1-137-858-11	TANTALUM CHIP	47uF	20%	6.3V
C9037	1-128-627-11	CERAMIC CHIP	0.001uF	10%	16V
C9501	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C9502	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9503	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V

Ref. No.	Part No.	Description			Remark
C9504	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9505	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C9506	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9507	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9508	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9509	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9510	1-164-842-11	CERAMIC CHIP	2PF	0.25PF	50V
C9511	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9512	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9513	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9514	1-165-897-11	TANTALUM CHIP	22uF	20%	10V
C9515	1-165-897-11	TANTALUM CHIP	22uF	20%	10V
C9517	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
		< CONNECTOR >			
CN2001	1-818-601-11	CONNECTOR, FPC (ZIF) 51P			
CN5001	1-818-600-11	CONNECTOR, FPC (ZIF) 39P			
CN5002	1-818-599-21	CONNECTOR, FPC (ZIF) 6P			
CN5003	1-816-922-21	CONNECTOR, FPC (ZIF) 5P			
CN9501	1-770-619-11	PIN, CONNECTOR 2P			
CN9502	1-816-943-21	CONNECTOR			
		< DIODE >			
D4101	8-719-046-91	DIODE	MA2S111		
D4201	8-719-046-91	DIODE	MA2S111		
D4301	8-719-046-85	DIODE	MA2S728		
D4302	6-500-776-01	DIODE	MAZW068H0LS0		
D4303	6-500-776-01	DIODE	MAZW068H0LS0		
D4304	6-500-776-01	DIODE	MAZW068H0LS0		
D4445	8-719-046-85	DIODE	MA2S728		
D5001	8-719-046-85	DIODE	MA2S728		
D5002	8-719-046-85	DIODE	MA2S728		
D5003	8-719-056-49	DIODE	1SS370 (TE85L)		
D9001	6-500-813-01	DIODE	MA2SD32008S0		
D9002	6-500-813-01	DIODE	MA2SD32008S0		
D9003	6-500-813-01	DIODE	MA2SD32008S0		
D9005	6-500-813-01	DIODE	MA2SD32008S0		
D9501	6-500-238-01	DIODE	CUS01 (TE85R)		
		< FUSE >			
⚠F4301	1-576-439-41	FUSE (SMD) (250mA/125V)			
		< FERRITE BEAD/RESISTOR >			
FB1001	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB1002	1-469-084-21	FERRITE			
FB1004	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB1005	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB1006	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB1011	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB1101	1-469-084-21	FERRITE			
FB2001	1-469-084-21	FERRITE			
FB4101	1-400-808-21	INDUCTOR (EMI FERRITE) (1608)			
FB4201	1-400-808-21	INDUCTOR (EMI FERRITE) (1608)			
FB4301	1-400-693-21	INDUCTOR, FERRITE BEAD (1005)			
FB4302	1-218-941-11	RES-CHIP	100	5%	1/16W
FB4303	1-400-198-21	INDUCTOR, FERRITE BEAD (1005)			
FB4304	1-400-693-21	INDUCTOR, FERRITE BEAD (1005)			
FB4305	1-400-808-21	INDUCTOR (EMI FERRITE) (1608)			

Ref. No.	Part No.	Description			Remark
FB7001	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB7002	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB7003	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB7004	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB9001	1-400-254-21	INDUCTOR, FERRITE BEAD			
FB9501	1-400-180-21	INDUCTOR, EMI FERRITE (1608)			
FB9502	1-400-180-21	INDUCTOR, EMI FERRITE (1608)			
		< IC >			
* IC1001	6-703-107-01	IC	SN74LVC2G66DCUR		
* IC1002	6-703-107-01	IC	SN74LVC2G66DCUR		
@ IC1003	8-752-933-96	IC	CXR704060-201GA		
@ IC1101	(Not supplied)	IC	MBM29SL800BE-90PBT		
@ IC2001	6-706-311-01	IC	S1R72003BOOA100		
@ IC3001	8-753-224-63	IC	CXR710160-211GH		
IC4301	6-700-662-01	IC	AN17020A-VB		
IC4302	6-705-495-01	IC	R1180Q241B-TR-FA		
IC5001	8-759-830-70	IC	SM8142BD-G-EL		
@ IC7001	8-753-218-21	IC	CXD1616GH		
@ IC7002	6-706-561-01	IC	EDL1216CASA-10L-E		
IC8000	6-706-558-01	IC	HAAM-301BS		
IC8001	6-704-350-01	IC	SN74LVC1G66DCKR		
IC9001	6-705-577-01	IC	LTC3441EDE#TR		
IC9002	6-704-997-01	IC	SC901584EPR2		
IC9003	6-703-802-01	IC	TPS62200DBVR		
IC9501	6-704-354-01	IC	BQ24010ADRCR		
IC9502	6-703-011-01	IC	TC7SZ126AFE		
IC9503	6-703-012-01	IC	R2061K01-E2		
IC9504	6-706-575-01	IC	TPS2113PWR		
		< JACK >			
J4301	1-818-591-11	JACK (SMALL TYPE) (🎧/LINE OUT)			
		< COIL >			
L3001	1-400-797-11	INDUCTOR	100uH		
L3002	1-400-797-11	INDUCTOR	100uH		
L4301	1-400-646-11	INDUCTOR	100uH		
L5001	1-400-776-11	INDUCTOR	220uH		
L9001	1-400-306-11	INDUCTOR	100uH		
* L9002	1-400-581-11	INDUCTOR	220uH		
* L9003	1-400-581-11	INDUCTOR	220uH		
L9004	1-400-810-11	INDUCTOR	4.7uH		
L9005	1-456-274-21	INDUCTOR	10uH		
		< TRANSISTOR >			
Q1001	6-551-056-01	TRANSISTOR	NP0A54700AS0		
Q2001	6-550-378-01	FET	ECH8301-TL-E		
Q9001	8-729-032-62	FET	2SJ347-TE85L		
Q9002	6-551-074-01	TRANSISTOR	NP0A50100AS0		
Q9003	6-550-234-01	TRANSISTOR	UNR32A300LS0		
Q9004	6-551-074-01	TRANSISTOR	NP0A50100AS0		
Q9501	6-551-057-01	TRANSISTOR	NP062A300AS0		
Q9502	6-550-379-01	FET	2SK354700LS0		
Q9503	6-550-234-01	TRANSISTOR	UNR32A300LS0		
		< RESISTOR/FERRITE >			
R1001	1-218-985-11	RES-CHIP	470K	5%	1/16W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

@ Replacement of IC1003, 1101, 2001, 3001, 7001 and 7002 use in this set requires a special tool.

MAIN

Ref. No.	Part No.	Description			Remark
R1002	1-218-990-11	SHORT CHIP	0		
R1005	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1006	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1007	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1008	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1009	1-218-990-11	SHORT CHIP	0		
R1011	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1013	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1015	1-218-990-11	SHORT CHIP	0		
R1016	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1017	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1018	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1019	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1021	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1022	1-218-990-11	SHORT CHIP	0		
R1023	1-218-990-11	SHORT CHIP	0		
R1025	1-218-990-11	SHORT CHIP	0		
R1026	1-218-990-11	SHORT CHIP	0		
R1027	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1028	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1029	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1047	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R1102	1-218-990-11	SHORT CHIP	0		
R1103	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1110	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R1111	1-208-944-11	METAL CHIP	240K	0.5%	1/16W
R1201	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1202	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1203	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1204	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1205	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1206	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1207	1-218-989-11	RES-CHIP	1M	5%	1/16W
R2001	1-208-635-11	METAL CHIP	10	0.5%	1/16W
R2003	1-469-084-21	FERRITE			
R2004	1-218-977-11	RES-CHIP	100K	5%	1/16W
R2005	1-208-701-11	METAL CHIP	5.6K	0.5%	1/16W
R2006	1-218-985-11	RES-CHIP	470K	5%	1/16W
R2007	1-218-985-11	RES-CHIP	470K	5%	1/16W
R2008	1-218-985-11	RES-CHIP	470K	5%	1/16W
R2009	1-218-990-11	SHORT CHIP	0		
R2010	1-218-989-11	RES-CHIP	1M	5%	1/16W
R2011	1-218-989-11	RES-CHIP	1M	5%	1/16W
R2012	1-218-935-11	RES-CHIP	33	5%	1/16W
R2013	1-218-935-11	RES-CHIP	33	5%	1/16W
R2014	1-218-940-11	RES-CHIP	82	5%	1/16W
R2015	1-218-933-11	RES-CHIP	22	5%	1/16W
R2016	1-218-940-11	RES-CHIP	82	5%	1/16W
R2017	1-218-933-11	RES-CHIP	22	5%	1/16W
R2018	1-218-933-11	RES-CHIP	22	5%	1/16W
R2019	1-218-940-11	RES-CHIP	82	5%	1/16W
R2020	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2021	1-218-962-11	RES-CHIP	5.6K	5%	1/16W
R2022	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R2023	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2024	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2025	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2026	1-218-935-11	RES-CHIP	33	5%	1/16W
R2027	1-218-935-11	RES-CHIP	33	5%	1/16W
R2028	1-218-935-11	RES-CHIP	33	5%	1/16W
R2029	1-218-935-11	RES-CHIP	33	5%	1/16W
R2030	1-218-935-11	RES-CHIP	33	5%	1/16W
R2031	1-218-935-11	RES-CHIP	33	5%	1/16W
R2032	1-218-935-11	RES-CHIP	33	5%	1/16W
R2033	1-218-935-11	RES-CHIP	33	5%	1/16W
R2034	1-218-935-11	RES-CHIP	33	5%	1/16W
R2035	1-218-935-11	RES-CHIP	33	5%	1/16W
R2036	1-218-935-11	RES-CHIP	33	5%	1/16W
R2037	1-218-935-11	RES-CHIP	33	5%	1/16W
R2038	1-218-935-11	RES-CHIP	33	5%	1/16W
R2039	1-218-935-11	RES-CHIP	33	5%	1/16W
R2040	1-218-935-11	RES-CHIP	33	5%	1/16W
R2041	1-218-935-11	RES-CHIP	33	5%	1/16W
R2042	1-218-935-11	RES-CHIP	33	5%	1/16W
R2043	1-218-935-11	RES-CHIP	33	5%	1/16W
R2044	1-218-935-11	RES-CHIP	33	5%	1/16W
R2045	1-218-973-11	RES-CHIP	47K	5%	1/16W
R2046	1-218-990-11	SHORT CHIP	0		
R3002	1-218-985-11	RES-CHIP	470K	5%	1/16W
R3004	1-218-945-11	RES-CHIP	220	5%	1/16W
R3005	1-218-990-11	SHORT CHIP	0		
R3006	1-218-985-11	RES-CHIP	470K	5%	1/16W
R3010	1-218-985-11	RES-CHIP	470K	5%	1/16W
R3014	1-218-990-11	SHORT CHIP	0		
R3015	1-218-990-11	SHORT CHIP	0		
R3019	1-218-990-11	SHORT CHIP	0		
R3020	1-218-990-11	SHORT CHIP	0		
R3021	1-218-990-11	SHORT CHIP	0		
R3022	1-218-990-11	SHORT CHIP	0		
R3023	1-218-990-11	SHORT CHIP	0		
R3024	1-218-990-11	SHORT CHIP	0		
R3025	1-218-990-11	SHORT CHIP	0		
R4002	1-218-989-11	RES-CHIP	1M	5%	1/16W
R4101	1-218-967-11	RES-CHIP	15K	5%	1/16W
R4102	1-218-966-11	RES-CHIP	12K	5%	1/16W
R4103	1-218-933-11	RES-CHIP	22	5%	1/16W
R4104	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4105	1-218-990-11	SHORT CHIP	0		
R4201	1-218-967-11	RES-CHIP	15K	5%	1/16W
R4202	1-218-966-11	RES-CHIP	12K	5%	1/16W
R4203	1-218-933-11	RES-CHIP	22	5%	1/16W
R4204	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4205	1-218-990-11	SHORT CHIP	0		
R4301	1-208-635-11	METAL CHIP	10	0.5%	1/16W
R4302	1-218-990-11	SHORT CHIP	0		
R4305	1-242-967-11	RES-CHIP	1	5%	1/16W
R4307	1-218-979-11	RES-CHIP	150K	5%	1/16W
R4308	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4309	1-218-990-11	SHORT CHIP	0		
R4313	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4316	1-218-933-11	RES-CHIP	22	5%	1/16W
R5001	1-208-942-11	METAL CHIP	200K	0.5%	1/16W
R5002	1-218-978-11	RES-CHIP	120K	5%	1/16W
R5003	1-218-968-11	RES-CHIP	18K	5%	1/16W
R5004	1-218-990-11	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
R5005	1-218-990-11	SHORT CHIP	0		
R5008	1-208-703-11	METAL CHIP	6.8K	0.5%	1/16W
R5009	1-208-703-11	METAL CHIP	6.8K	0.5%	1/16W
R5010	1-208-695-11	METAL CHIP	3.3K	0.5%	1/16W
R5011	1-208-695-11	METAL CHIP	3.3K	0.5%	1/16W
R5012	1-218-989-11	RES-CHIP	1M	5%	1/16W
R5013	1-218-989-11	RES-CHIP	1M	5%	1/16W
R5014	1-208-687-11	METAL CHIP	1.5K	0.5%	1/16W
R5015	1-208-687-11	METAL CHIP	1.5K	0.5%	1/16W
R5016	1-208-683-11	METAL CHIP	1K	0.5%	1/16W
R5017	1-208-683-11	METAL CHIP	1K	0.5%	1/16W
R5018	1-218-985-11	RES-CHIP	470K	5%	1/16W
R5019	1-208-679-11	METAL CHIP	680	0.5%	1/16W
R5020	1-208-679-11	METAL CHIP	680	0.5%	1/16W
R5021	1-208-699-11	METAL CHIP	4.7K	0.5%	1/16W
R5022	1-208-699-11	METAL CHIP	4.7K	0.5%	1/16W
R5023	1-218-985-11	RES-CHIP	470K	5%	1/16W
R5024	1-208-635-11	METAL CHIP	10	0.5%	1/16W
R7001	1-218-953-11	RES-CHIP	1K	5%	1/16W
R7002	1-218-977-11	RES-CHIP	100K	5%	1/16W
R7003	1-218-953-11	RES-CHIP	1K	5%	1/16W
R7004	1-218-953-11	RES-CHIP	1K	5%	1/16W
R7005	1-218-990-11	SHORT CHIP	0		
R7006	1-218-985-11	RES-CHIP	470K	5%	1/16W
R7008	1-218-990-11	SHORT CHIP	0		
R7009	1-218-985-11	RES-CHIP	470K	5%	1/16W
R7010	1-218-985-11	RES-CHIP	470K	5%	1/16W
R7011	1-218-933-11	RES-CHIP	22	5%	1/16W
R7012	1-218-933-11	RES-CHIP	22	5%	1/16W
R8001	1-218-985-11	RES-CHIP	470K	5%	1/16W
R8002	1-208-635-11	METAL CHIP	10	0.5%	1/16W
R8005	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R8006	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R8007	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R8008	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R8009	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R8010	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R9000	1-218-973-11	RES-CHIP	47K	5%	1/16W
R9001	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R9002	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R9003	1-218-989-11	RES-CHIP	1M	5%	1/16W
R9004	1-218-989-11	RES-CHIP	1M	5%	1/16W
R9005	1-218-941-11	RES-CHIP	100	5%	1/16W
R9006	1-218-941-11	RES-CHIP	100	5%	1/16W
R9007	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R9008	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9009	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9010	1-218-967-11	RES-CHIP	15K	5%	1/16W
R9011	1-208-947-11	METAL CHIP	330K	0.5%	1/16W
R9012	1-244-161-11	RES-CHIP	2.2	5%	1/16W
R9013	1-218-989-11	RES-CHIP	1M	5%	1/16W
R9014	1-208-939-11	METAL CHIP	150K	0.5%	1/16W
R9015	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R9016	1-218-977-11	RES-CHIP	100K	5%	1/16W
R9018	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9019	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R9020	1-218-970-11	RES-CHIP	27K	5%	1/16W
R9021	1-208-894-11	METAL CHIP	2K	0.5%	1/16W
R9022	1-208-720-11	METAL CHIP	36K	0.5%	1/16W
R9023	1-208-720-11	METAL CHIP	36K	0.5%	1/16W
R9024	1-208-720-11	METAL CHIP	36K	0.5%	1/16W
R9027	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9028	1-202-974-11	RES-CHIP	3.3M	5%	1/16W
R9029	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R9030	1-208-939-11	METAL CHIP	150K	0.5%	1/16W
R9031	1-218-990-11	SHORT CHIP	0		
R9032	1-208-942-11	METAL CHIP	200K	0.5%	1/16W
R9033	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R9034	1-208-713-11	METAL CHIP	18K	0.5%	1/16W
R9035	1-220-804-11	RES-CHIP	2.2M	5%	1/16W
R9036	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R9037	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9038	1-218-965-11	RES-CHIP	10K	5%	1/16W
R9040	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9041	1-218-989-11	RES-CHIP	1M	5%	1/16W
R9501	1-208-697-11	METAL CHIP	3.9K	0.5%	1/16W
R9502	1-208-703-11	METAL CHIP	6.8K	0.5%	1/16W
R9503	1-208-699-11	METAL CHIP	4.7K	0.5%	1/16W
R9504	1-218-977-11	RES-CHIP	100K	5%	1/16W
R9505	1-208-894-11	METAL CHIP	2K	0.5%	1/16W
R9506	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9507	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9509	1-218-949-11	RES-CHIP	470	5%	1/16W
R9511	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9512	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9513	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9514	1-218-990-11	SHORT CHIP	0		
R9515	1-216-864-11	SHORT CHIP	0		

< SWITCH >

S5009	1-786-030-21	SWITCH, SLIDE (HOLD)	
S9501	1-786-030-21	SWITCH, SLIDE (BUILT-IN BATTERY)	

< THERMISTOR >

TH9501	1-804-949-11	THERMISTOR, NTC (SMD)	

< VARISTOR/DIODE >

VDR1001	1-804-209-21	VARISTOR (SMD)	(1005)
VDR1002	1-804-209-21	VARISTOR (SMD)	(1005)
VDR2001	1-804-209-21	VARISTOR (SMD)	(1005)
VDR2002	1-804-209-21	VARISTOR (SMD)	(1005)
VDR3001	1-804-209-21	VARISTOR (SMD)	(1005)
VDR3002	1-804-209-21	VARISTOR (SMD)	(1005)
VDR3003	1-804-209-21	VARISTOR (SMD)	(1005)
VDR3004	1-804-209-21	VARISTOR (SMD)	(1005)
VDR7001	1-804-209-21	VARISTOR (SMD)	(1005)
VDR7002	1-804-209-21	VARISTOR (SMD)	(1005)
VDR9501	1-805-216-21	VARISTOR, CHIP	
VDR9502	1-805-216-21	VARISTOR, CHIP	
VDR9503	6-500-701-01	DIODE PGB0010603NR	
VDR9504	6-500-701-01	DIODE PGB0010603NR	
VDR9506	1-805-216-21	VARISTOR, CHIP	
VDR9507	1-805-216-21	VARISTOR, CHIP	

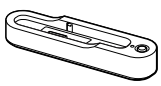
NW-HD1
Ver 1.1

MAIN

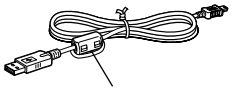
Ref. No.	Part No.	Description	Remark
		< VIBRATOR >	
X1002	1-795-891-21	VIBRATOR, CERAMIC (22.5792MHz)	
X2001	1-813-362-11	VIBRATOR, CRYSTAL (12MHz)	
X9501	1-795-602-11	VIBRATOR, CRYSTAL (32.768kHz)	
**********			
		MISCELLANEOUS	
		**********	
7	1-863-393-11	FLEXIBLE BOARD	
9	1-478-820-11	SWITCH UNIT (H)	
15	1-478-858-11	HDD UNIT	
**********			
		ACCESSORIES	
		**********	
⚠	1-478-393-11	ADAPTOR, AC (AC-ES608K) (US, Canadian)	
⚠	1-478-394-11	ADAPTOR, AC (AC-ES608K) (France)	
⚠	1-478-395-11	ADAPTOR, AC (AC-ES608K) (UK)	
	2-102-861-13	GUIDE, QUICK START (ENGLISH)	
	2-102-861-21	GUIDE, QUICK START (FRENCH)	(Canadian, France)
	2-178-760-01	CASE, CARRYING	
	X-2023-765-2	CD-ROM (COMBI/U) (SonicStage, PDF of Operating Instructions)	(US, Canadian)
	X-2023-766-1	CD-ROM (COMBI/CEX) (SonicStage, PDF of Operating Instructions)	(France, UK)
501	8-912-736-90	HEADPHONE MDR-E737LP/BO SET	(France, UK)
501	8-954-008-92	RECEIVER, EAR MDR-E808LP/C SET	(US, Canadian)
⚠502	1-478-818-11	USB CRADLE (BCA-NWHD1)	
503	1-829-238-21	CABLE, USB (France, UK)	
503	1-823-519-71	CORD, CONNECTION (DEDICATED USB CABLE)	(US, Canadian)
504	1-543-798-11	FILTER, CLAMP (FERRITE CORE)	(for USB CABLE)

501
HEADPHONES (1)

502
USB CRADLE (1)



503
DEDICATED USB CABLE (1)



504
CLAMP FILTER

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

NW-HD1

SONY

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model

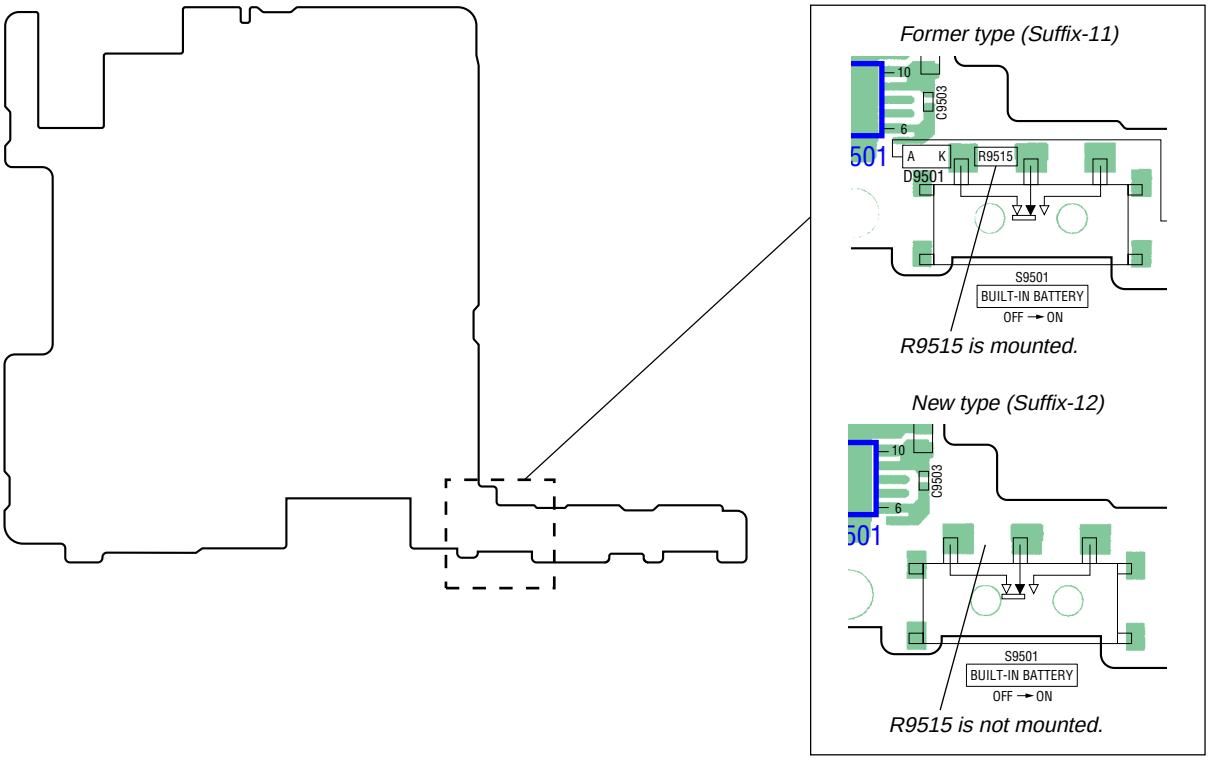
Ver 1.1 2004.09

SUPPLEMENT-1

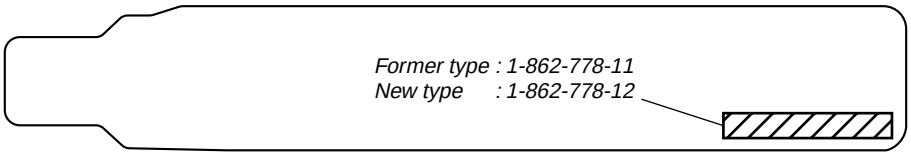
Subject: Printed Wiring Boards Modification (Suffix-12)

• **NEW/FORMER TYPE DISCRIMINATION**

– MAIN Board (Component Side) –



– HDD Board (Conductor Side) –



1. DIAGRAMS

- **Note for Printed Wiring Boards and Schematic Diagrams**

Note on Printed Wiring Board:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- △ : internal component.
- ▭ : Pattern from the side which enables seeing.

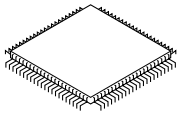
(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

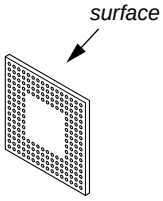
- MAIN and HDD boards are multi-layer printed board. However, the patterns of intermediate-layer have not been included in diagram.

* Replacement of IC1003, 1101, 2001, 3001, 7001 and 7002 used in this set requires a special tool.

- Lead Layouts



Lead layout of conventional IC



CSP (chip size package)

Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

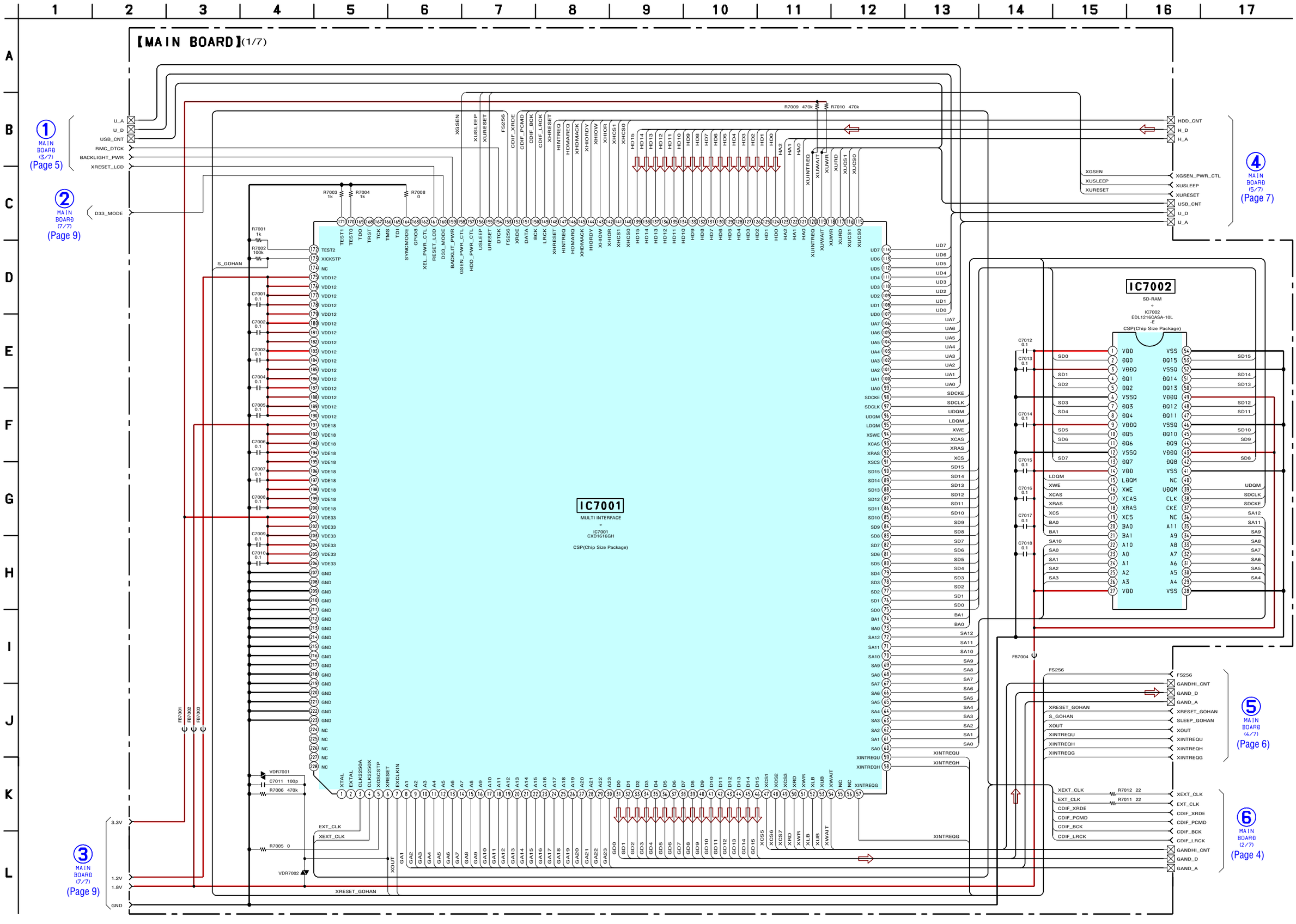
Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬ : B+ Line.
- Power voltage is dc 4.2 V and fed with regulated dc power supply from CN9501.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : PLAYBACK
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : AUDIO

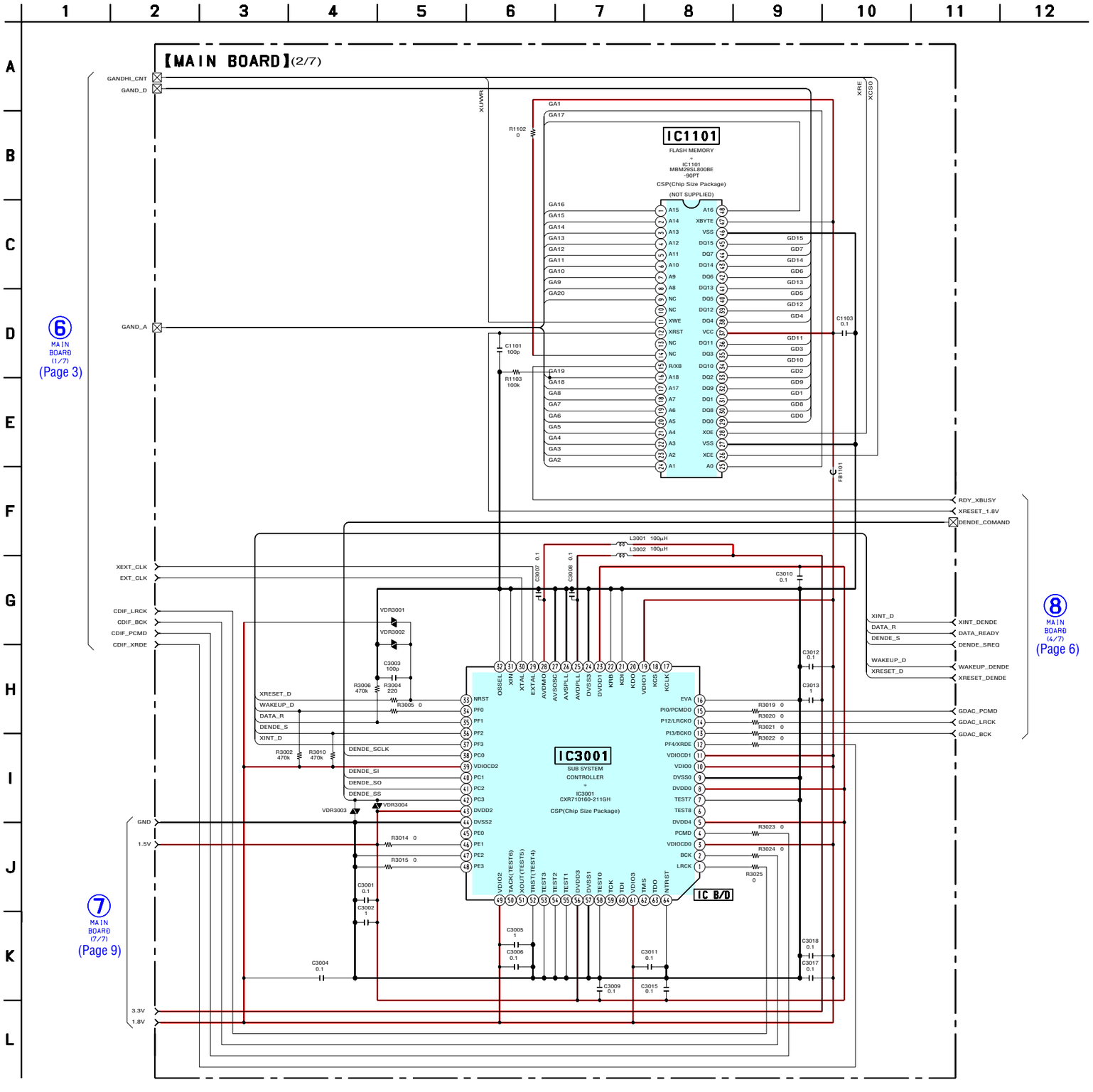
* Replacement of IC1003, 1101, 2001, 3001, 7001 and 7002 used in this set requires a special tool.

- The voltage and waveform of CSP (chip size package) cannot be measured, because its lead layout is different form that of conventional IC.

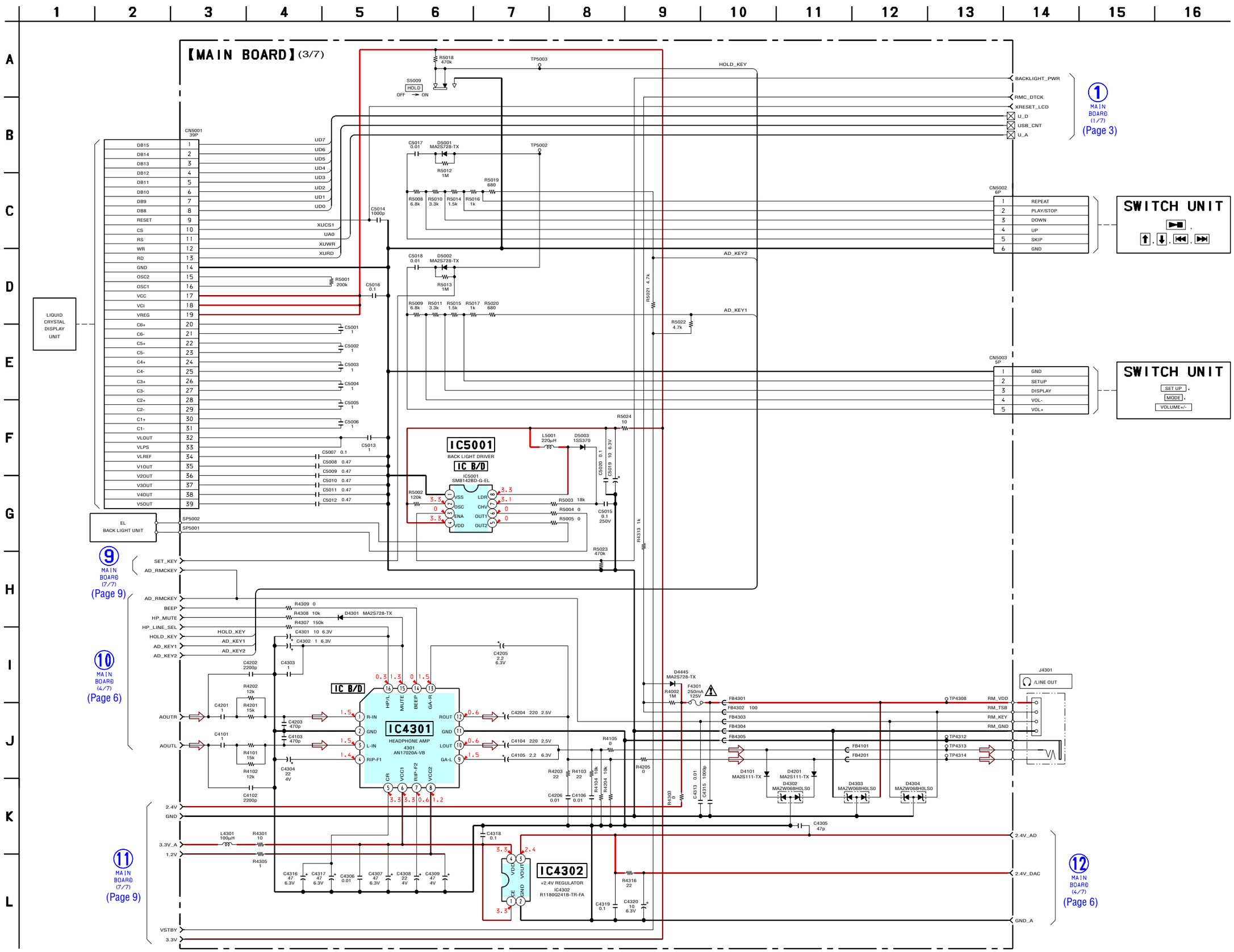
1-1. SCHEMATIC DIAGRAM – MAIN Section (1/7) –



1-2. SCHEMATIC DIAGRAM – MAIN Section (2/7) –

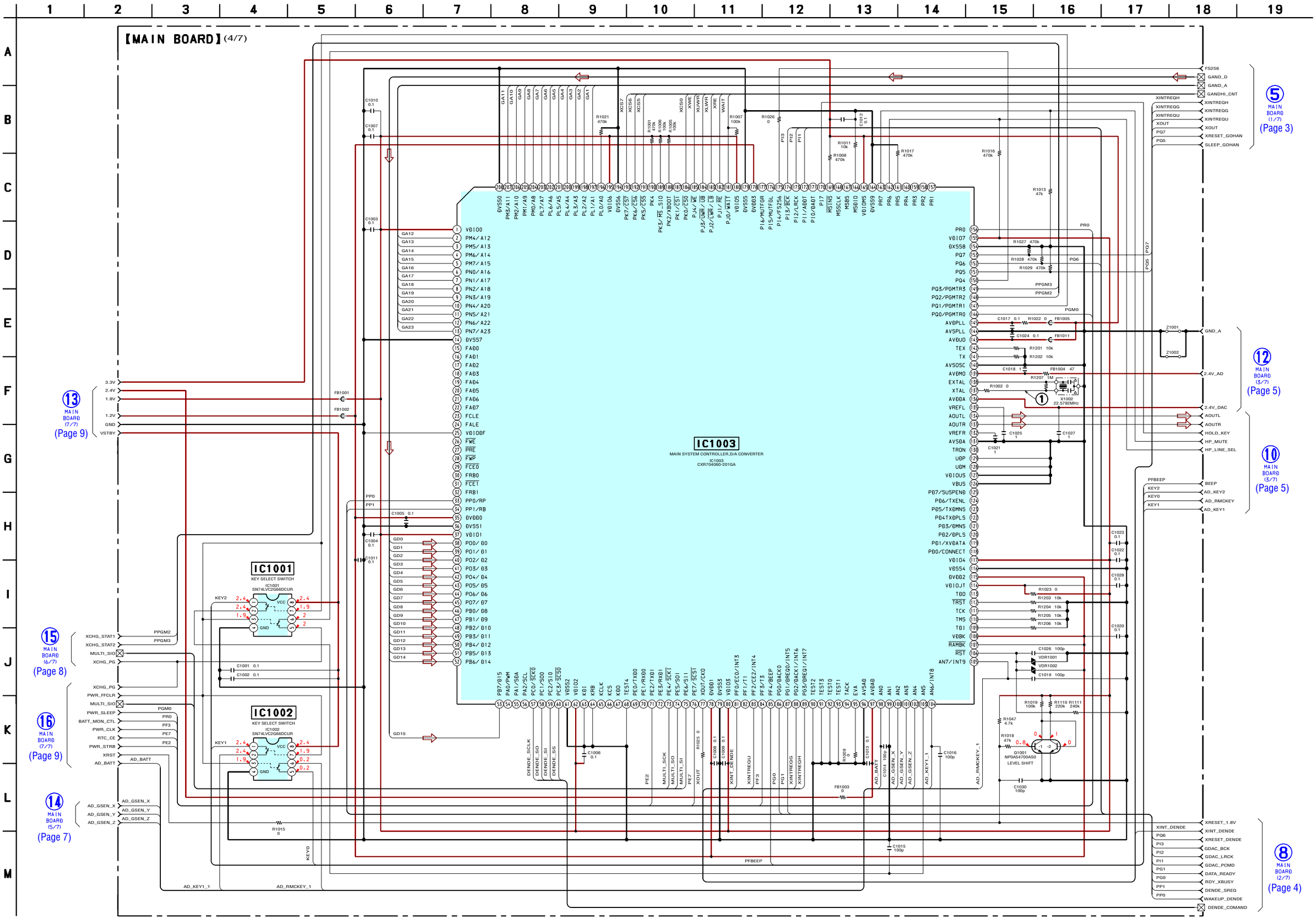


1-3. SCHEMATIC DIAGRAM – MAIN Section (3/7) –

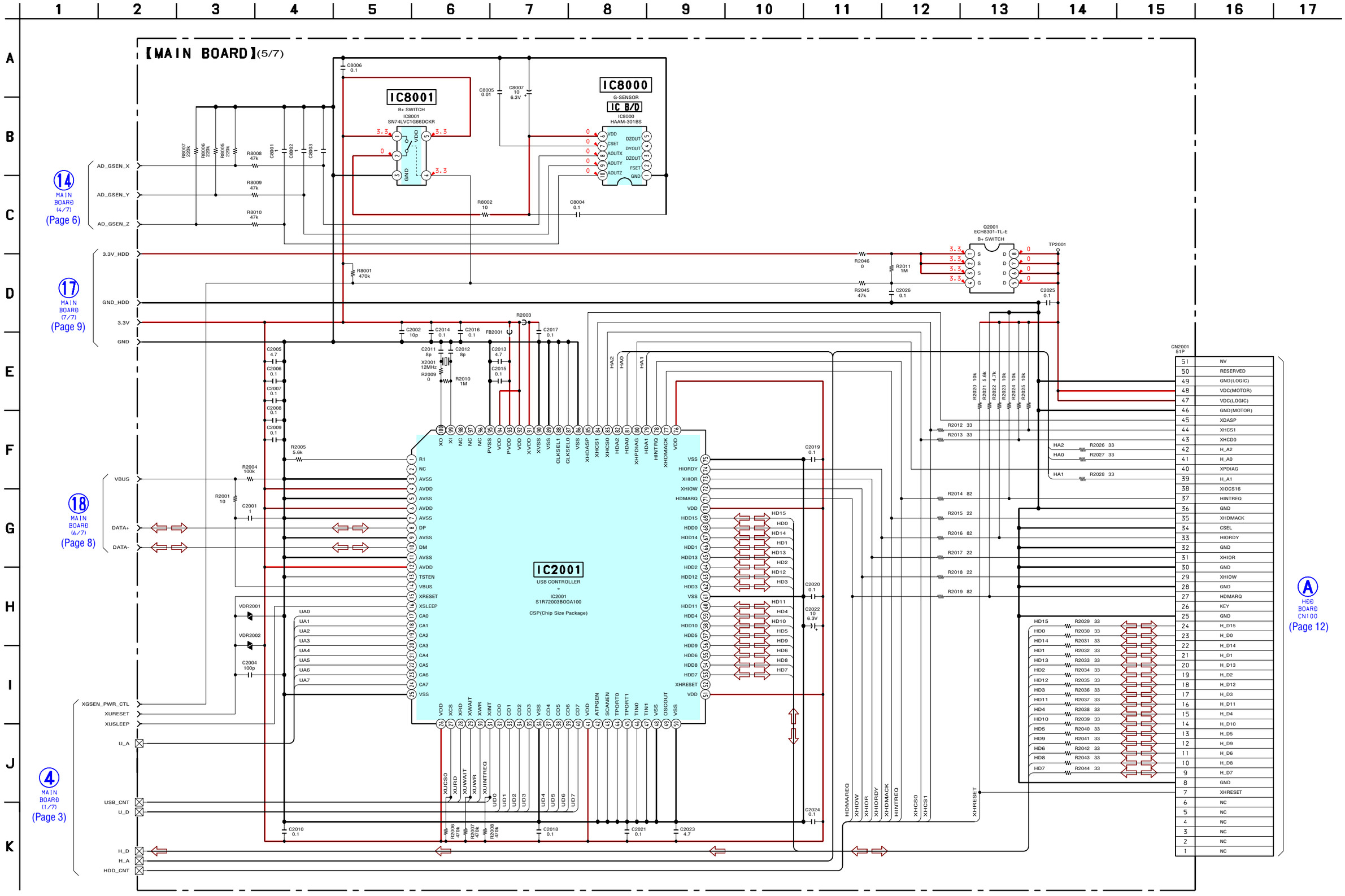


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

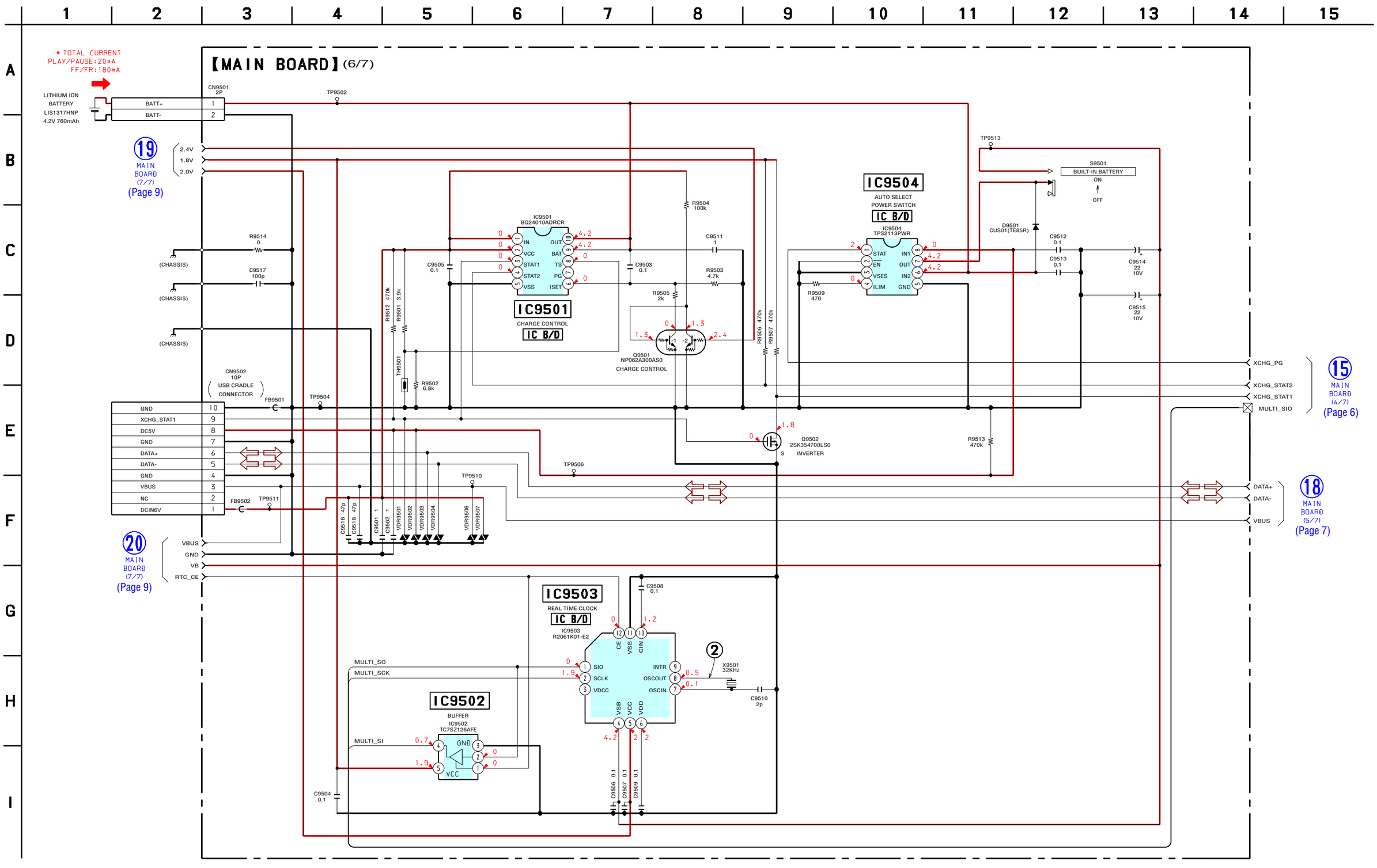
1-4. SCHEMATIC DIAGRAM – MAIN Section (4/7) –



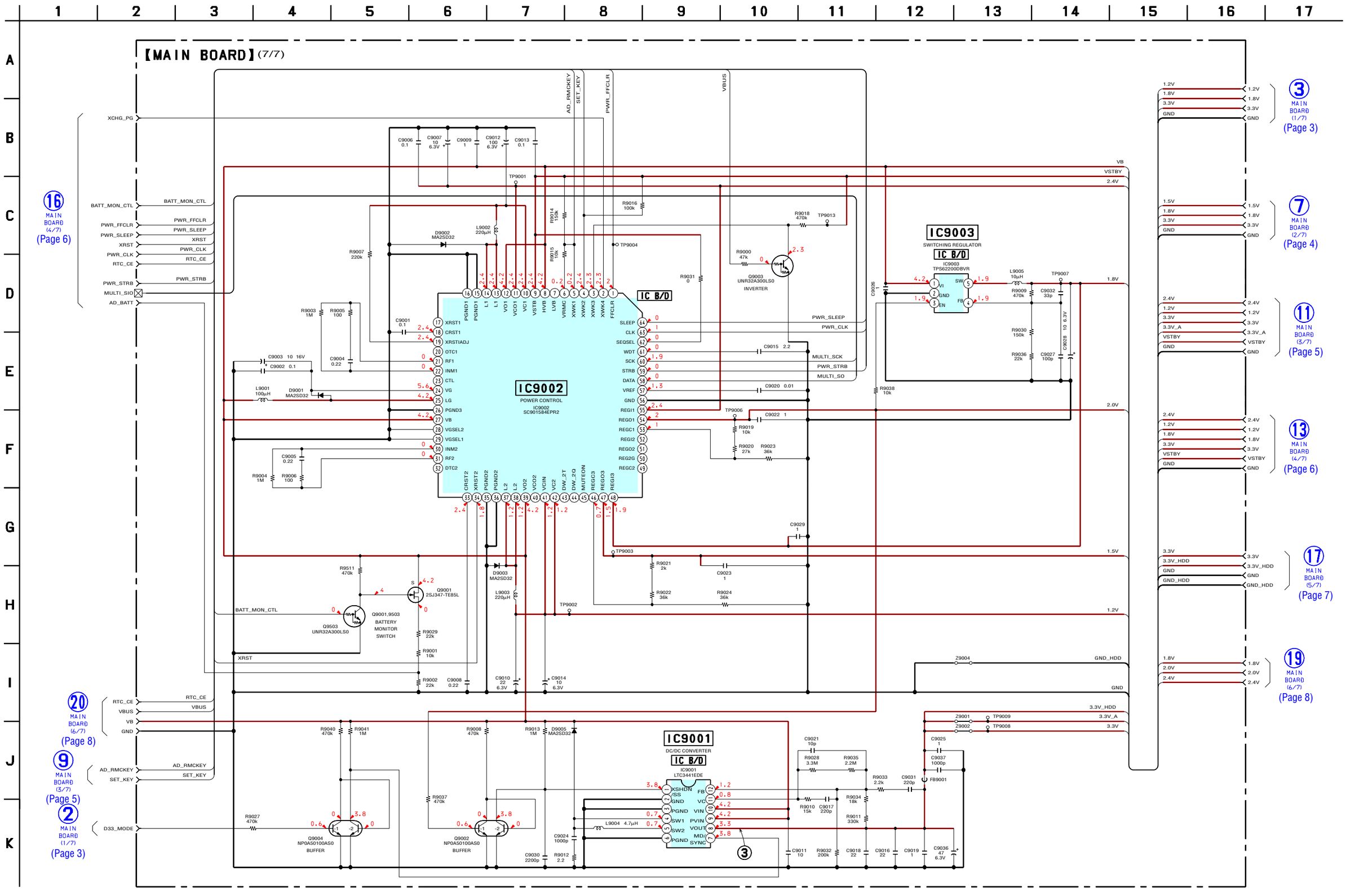
1-5. SCHEMATIC DIAGRAM – MAIN Section (5/7) –



1-6. SCHEMATIC DIAGRAM – MAIN Section (6/7) –



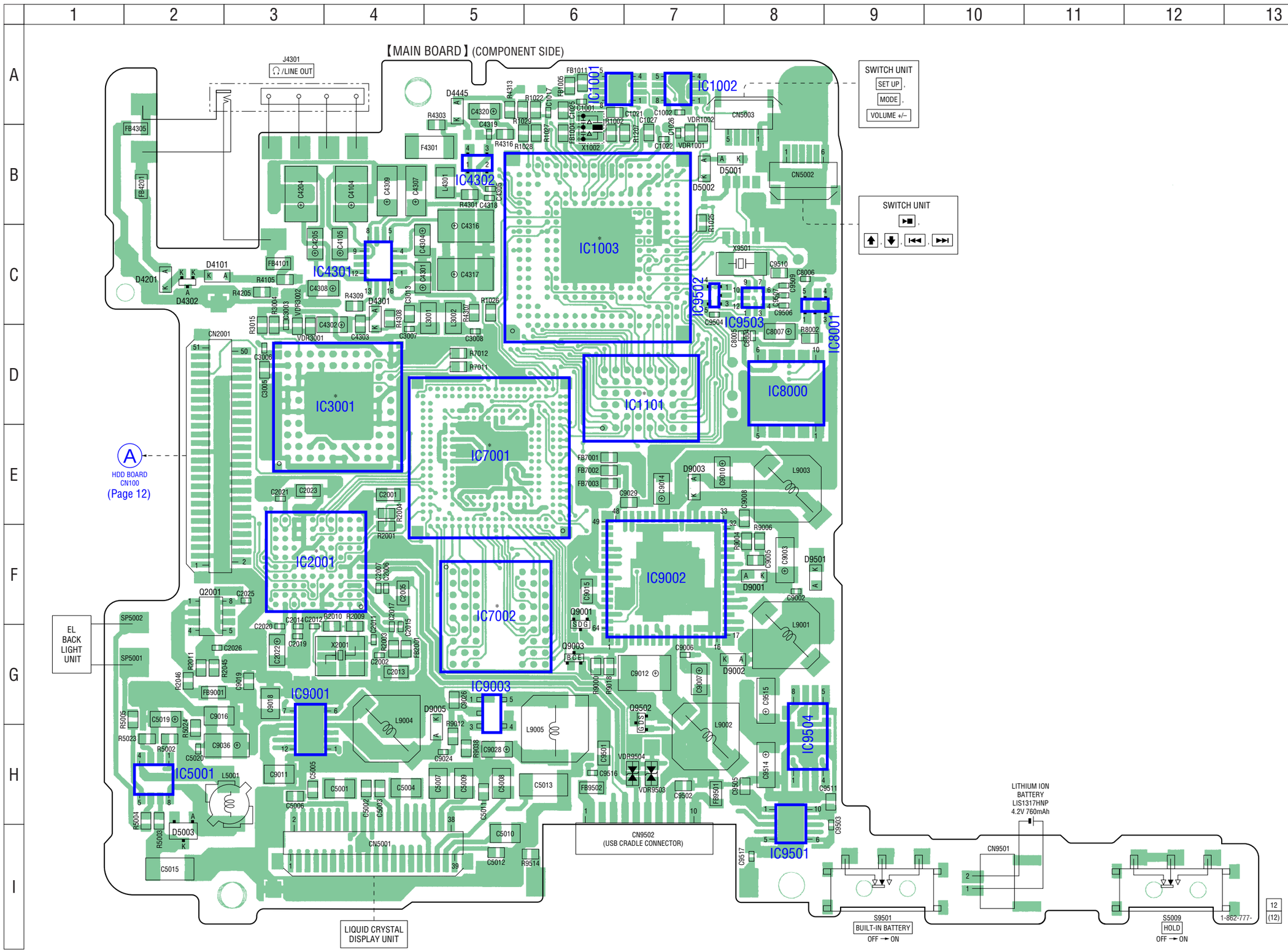
1-7. SCHEMATIC DIAGRAM – MAIN Section (7/7) –



1-8. PRINTED WIRING BOARD – MAIN Section (Component Side) – :Uses unleaded solder.

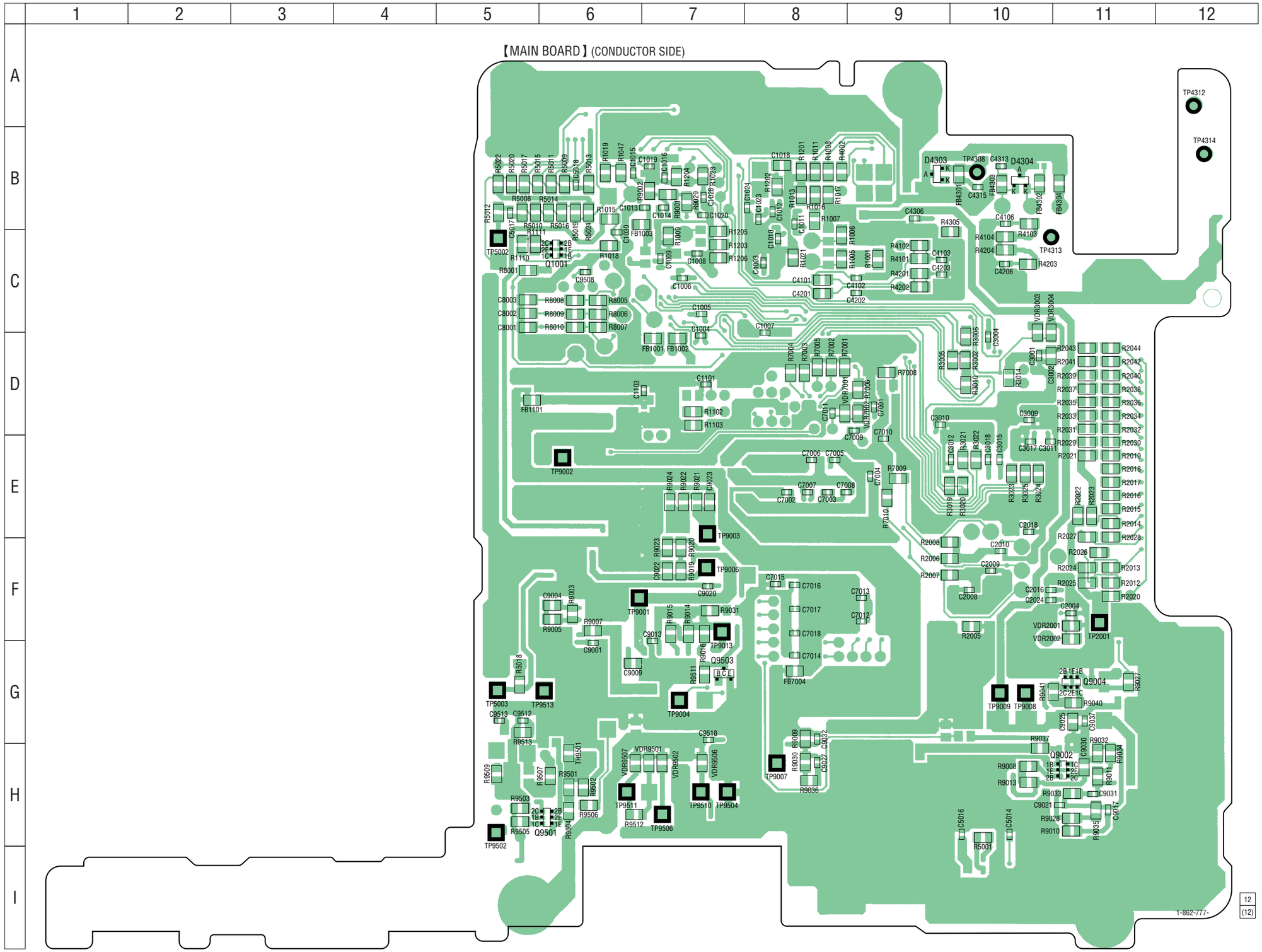
- **Semiconductor Location**

Ref. No.	Location
D4101	C-2
D4201	C-2
D4301	C-4
D4302	C-2
D4445	A-5
D5001	B-8
D5002	B-7
D5003	I-2
D9001	F-8
D9002	G-8
D9003	E-7
D9005	H-5
D9006	I-9
D9501	F-8
IC1001	A-6
IC1002	A-7
IC1003	C-6
IC1101	D-7
IC2001	F-3
IC3001	D-4
IC4301	C-4
IC4302	B-5
IC5001	H-2
IC7001	E-5
IC7002	F-5
IC8000	D-8
IC8001	C-8
IC9001	H-3
IC9002	F-7
IC9003	G-5
IC9501	H-8
IC9502	C-7
IC9503	C-8
IC9504	H-8
Q2001	F-2
Q9001	F-6
Q9003	G-6
Q9502	G-7
VDR9503	H-7
VDR9504	H-7



1-9. PRINTED WIRING BOARD – MAIN Section (Conductor Side) – :Uses unleaded solder.

【MAIN BOARD】(CONDUCTOR SIDE)

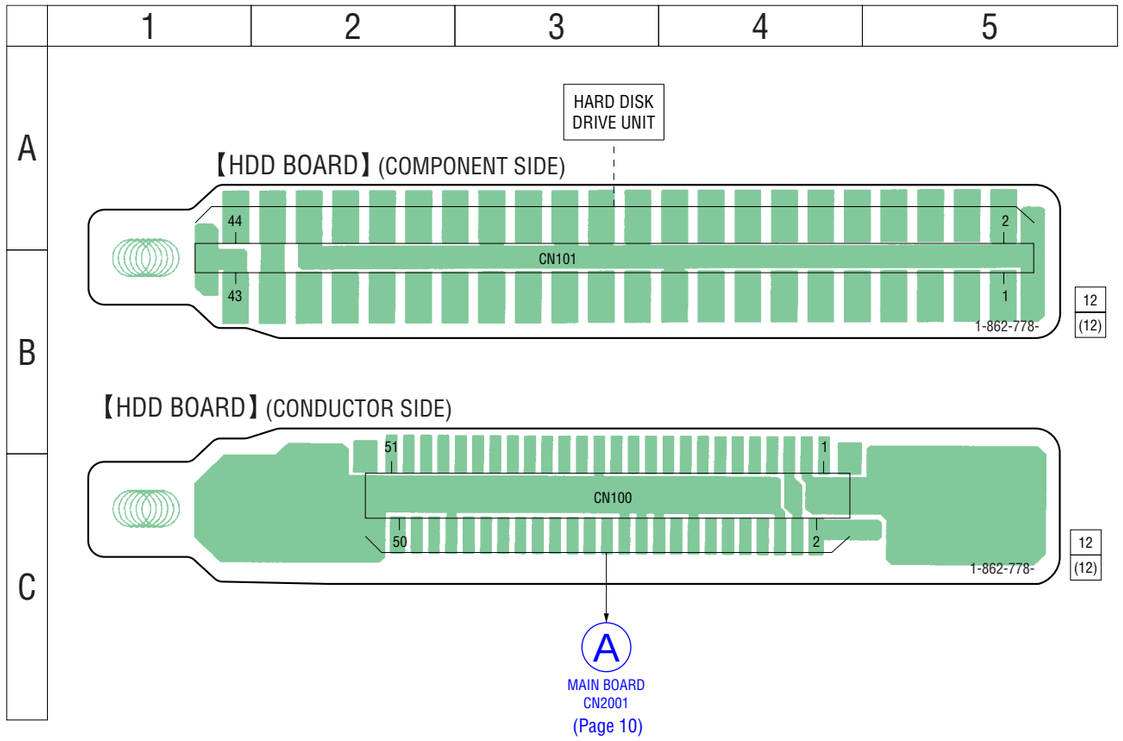


- **Semiconductor Location**

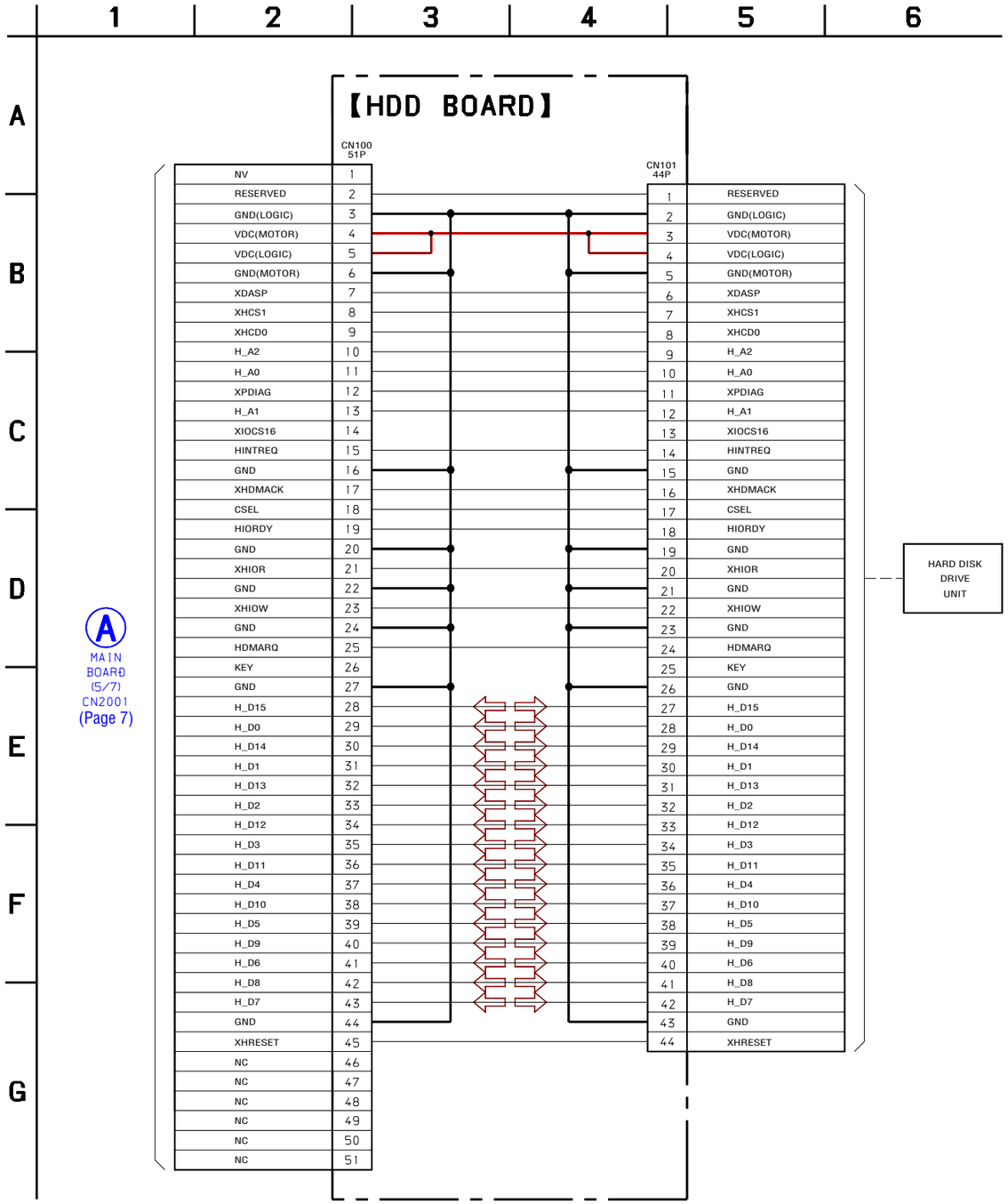
Ref. No.	Location
D4303	B-9
D4304	B-10
Q1001	C-6
Q9002	H-11
Q9004	G-11
Q9501	H-6
Q9503	G-7

1-10. PRINTED WIRING BOARD – HDD Section –

:Uses unleaded solder.



1-11. SCHEMATIC DIAGRAM – HDD Section –



2. ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA... : µA... uPA... : µPA...
  uPB... : µPB... uPC... : µPC...
  uPD... : µPD...
- CAPACITORS
  uF: µF
- COILS
  uH: µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-1063-220-A	HDD BOARD, COMPLETE			
		**********			
		< CONNECTOR >			
CN100	1-818-601-11	CONNECTOR, FPC (ZIF) 51P			
**********					
	X-2023-004-1	MAIN BOARD, COMPLETE (for service)			
		**********			
	2-178-122-01	SPACER E			
	2-178-123-01	SPACER F			
	2-178-124-02	SPACER (G)			
	2-178-125-01	SPACER H			
	2-178-126-01	SPACER I			
	2-178-127-02	SPACER (J)			
	2-178-527-01	SHEET (HP)			
	2-318-882-01	SHEET (USB HORIZONTAL)			
	2-349-382-01	SHEET (BUSTERAID USB)			
	2-349-383-01	SHEET (BUSTERAID IC)			
		< CAPACITOR >			
C1001	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1002	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1003	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1004	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1005	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1006	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1007	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1008	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1009	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1010	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1011	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1012	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1013	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1014	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C1015	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C1016	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C1017	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1018	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C1019	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C1020	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1021	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C1022	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1023	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1024	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1025	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C1026	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C1027	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C1028	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C1030	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C1101	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C1103	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2001	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C2002	1-128-604-11	CERAMIC CHIP	10PF	0.5PF	25V
C2004	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C2005	1-100-507-91	CERAMIC CHIP	4.7uF	20%	6.3V
C2006	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2007	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2008	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2009	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2010	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2011	1-127-998-11	CERAMIC CHIP	8PF	0.5PF	25V
C2012	1-127-998-11	CERAMIC CHIP	8PF	0.5PF	25V
C2013	1-100-507-91	CERAMIC CHIP	4.7uF	20%	6.3V
C2014	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2015	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2016	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2017	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2018	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2019	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2020	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2021	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2022	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C2023	1-100-507-91	CERAMIC CHIP	4.7uF	20%	6.3V
C2024	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2025	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C2026	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3001	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3002	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C3003	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C3004	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3005	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C3006	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3007	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3008	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3009	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3010	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V

MAIN

Ref. No.	Part No.	Description			Remark
C3011	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3012	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3013	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C3015	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3017	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C3018	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C4101	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C4102	1-128-628-11	CERAMIC CHIP	0.0022uF	10%	6.3V
C4103	1-128-625-11	CERAMIC CHIP	470PF	10%	16V
C4104	1-135-868-11	TANTALUM CHIP	220uF	20%	2.5V
C4105	1-113-600-11	TANTALUM CHIP	2.2uF	20%	6.3V
C4106	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C4201	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C4202	1-128-628-11	CERAMIC CHIP	0.0022uF	10%	6.3V
C4203	1-128-625-11	CERAMIC CHIP	470PF	10%	16V
C4204	1-135-868-11	TANTALUM CHIP	220uF	20%	2.5V
C4205	1-113-600-11	TANTALUM CHIP	2.2uF	20%	6.3V
C4206	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C4301	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C4302	1-135-337-11	TANTALUM CHIP	1uF	20%	6.3V
C4303	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C4304	1-127-895-11	TANTALUM CHIP	22uF	20%	4V
C4305	1-128-613-91	CERAMIC CHIP	47PF	5%	25V
C4306	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C4307	1-100-539-11	TANTALUM CHIP	47uF	20%	6.3V
C4308	1-127-895-11	TANTALUM CHIP	22uF	20%	4V
C4309	1-131-862-11	TANTALUM CHIP	47uF	20%	4V
C4313	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C4315	1-128-627-11	CERAMIC CHIP	0.001uF	10%	16V
C4316	1-125-839-11	TANTALUM CHIP	47uF	20%	6.3V
C4317	1-125-839-11	TANTALUM CHIP	47uF	20%	6.3V
C4318	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C4319	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C4320	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C5001	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C5002	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C5003	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C5004	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C5005	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C5006	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C5007	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C5008	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C5009	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C5010	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C5011	1-100-415-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5012	1-100-415-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5013	1-125-827-11	CERAMIC CHIP	1uF	10%	25V
C5014	1-128-627-11	CERAMIC CHIP	0.001uF	10%	16V
C5015	1-100-996-21	CERAMIC CHIP	0.1uF	10%	250V
C5016	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C5017	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C5018	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C5019	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C5020	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7001	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7002	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7003	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7004	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7005	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7006	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7007	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7008	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7009	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7010	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7011	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C7012	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7013	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7014	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7015	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7016	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7017	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C7018	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C8001	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C8002	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C8003	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C8004	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C8005	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C8006	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C8007	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C9001	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9002	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9003	1-100-845-11	TANTALUM CHIP	10uF	20%	16V
C9004	1-165-887-11	CERAMIC CHIP	0.22uF	10%	6.3V
C9005	1-165-887-11	CERAMIC CHIP	0.22uF	10%	6.3V
C9006	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9007	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C9008	1-165-887-11	CERAMIC CHIP	0.22uF	10%	6.3V
C9009	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9010	1-100-786-91	TANTALUM CHIP	22uF	20%	6.3V
C9011	1-100-733-91	CERAMIC CHIP	10uF	20%	6.3V
C9012	1-100-841-11	TANTALUM CHIP	100uF	20%	6.3V
C9013	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9014	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C9015	1-165-884-11	CERAMIC CHIP	2.2uF	10%	6.3V
C9016	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C9017	1-128-623-11	CERAMIC CHIP	220PF	10%	16V
C9018	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C9019	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9020	1-128-632-11	CERAMIC CHIP	0.01uF	10%	6.3V
C9021	1-128-604-11	CERAMIC CHIP	10PF	0.5PF	25V
C9022	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9023	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9024	1-128-627-11	CERAMIC CHIP	0.001uF	10%	16V
C9025	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9026	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9027	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C9028	1-117-919-11	TANTALUM CHIP	10uF	20%	6.3V
C9029	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9030	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C9031	1-128-623-11	CERAMIC CHIP	220PF	10%	16V
C9032	1-128-611-11	CERAMIC CHIP	33PF	5%	25V
C9036	1-137-858-11	TANTALUM CHIP	47uF	20%	6.3V
C9037	1-128-627-11	CERAMIC CHIP	0.001uF	10%	16V
C9501	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C9502	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V

Ref. No.	Part No.	Description			Remark
C9503	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9504	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9505	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C9506	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9507	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9508	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9509	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9510	1-164-842-11	CERAMIC CHIP	2PF	0.25PF	50V
C9511	1-100-506-11	CERAMIC CHIP	1uF	20%	6.3V
C9512	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9513	1-100-504-11	CERAMIC CHIP	0.1uF	20%	6.3V
C9514	1-165-897-11	TANTALUM CHIP	22uF	20%	10V
C9515	1-165-897-11	TANTALUM CHIP	22uF	20%	10V
C9516	1-128-613-91	CERAMIC CHIP	47PF	5%	25V
C9517	1-128-617-11	CERAMIC CHIP	100PF	5%	25V
C9518	1-128-613-91	CERAMIC CHIP	47PF	5%	25V
		< CONNECTOR >			
CN2001	1-818-601-11	CONNECTOR, FPC (ZIF) 51P			
CN5001	1-818-600-11	CONNECTOR, FPC (ZIF) 39P			
CN5002	1-818-599-21	CONNECTOR, FPC (ZIF) 6P			
CN5003	1-816-922-21	CONNECTOR, FPC (ZIF) 5P			
CN9501	1-770-619-11	PIN, CONNECTOR 2P			
CN9502	1-816-943-21	CONNECTOR			
		< DIODE >			
D4101	8-719-046-91	DIODE MA2S111			
D4201	8-719-046-91	DIODE MA2S111			
D4301	8-719-046-85	DIODE MA2S728			
D4302	6-500-776-01	DIODE MAZW068H0LS0			
D4303	6-500-776-01	DIODE MAZW068H0LS0			
D4304	6-500-776-01	DIODE MAZW068H0LS0			
D4445	8-719-046-85	DIODE MA2S728			
D5001	8-719-046-85	DIODE MA2S728			
D5002	8-719-046-85	DIODE MA2S728			
D5003	8-719-056-49	DIODE 1SS370 (TE85L)			
D9001	6-500-813-01	DIODE MA2SD32008S0			
D9002	6-500-813-01	DIODE MA2SD32008S0			
D9003	6-500-813-01	DIODE MA2SD32008S0			
D9005	6-500-813-01	DIODE MA2SD32008S0			
D9501	6-500-238-01	DIODE CUS01 (TE85R)			
		< FUSE >			
⚠F4301	1-576-439-41	FUSE (SMD) (250mA/125V)			
		< FERRITE BEAD/RESISTOR >			
FB1001	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB1002	1-469-084-21	FERRITE			
FB1003	1-218-990-11	SHORT CHIP	0		
FB1004	1-218-937-11	RES-CHIP	47	5%	1/16W
FB1005	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB1011	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB1101	1-469-084-21	FERRITE			
FB2001	1-469-084-21	FERRITE			
FB4101	1-400-808-21	INDUCTOR (EMI FERRITE) (1608)			
FB4201	1-400-808-21	INDUCTOR (EMI FERRITE) (1608)			
FB4301	1-400-693-21	INDUCTOR, FERRITE BEAD (1005)			

Ref. No.	Part No.	Description			Remark
FB4302	1-218-941-11	RES-CHIP	100	5%	1/16W
FB4303	1-400-198-21	INDUCTOR, FERRITE BEAD (1005)			
FB4304	1-400-693-21	INDUCTOR, FERRITE BEAD (1005)			
FB4305	1-400-808-21	INDUCTOR (EMI FERRITE) (1608)			
FB7001	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB7002	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB7003	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB7004	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)			
FB9001	1-400-254-21	INDUCTOR, FERRITE BEAD			
FB9501	1-400-180-21	INDUCTOR, EMI FERRITE (1608)			
FB9502	1-400-180-21	INDUCTOR, EMI FERRITE (1608)			
		< IC >			
* IC1001	6-703-107-01	IC SN74LVC2G66DCUR			
* IC1002	6-703-107-01	IC SN74LVC2G66DCUR			
@ IC1003	8-752-933-96	IC CXR704060-201GA			
@ IC1101	(Not supplied)	IC MBM29SL800BE-90PBT			
@ IC2001	6-706-311-01	IC S1R72003BOOA100			
@ IC3001	8-753-224-63	IC CXR710160-211GH			
IC4301	6-700-662-01	IC AN17020A-VB			
IC4302	6-705-495-01	IC R1180Q241B-TR-FA			
IC5001	8-759-830-70	IC SM8142BD-G-EL			
@ IC7001	8-753-218-21	IC CXD1616GH			
@ IC7002	6-706-561-01	IC EDL1216CASA-10L-E			
IC8000	6-706-558-01	IC HAAM-301BS			
IC8001	6-704-350-01	IC SN74LVC1G66DCKR			
IC9001	6-705-577-01	IC LTC3441EDE#TR			
IC9002	6-704-997-01	IC SC901584EPR2			
IC9003	6-703-802-01	IC TPS62200DBVR			
IC9501	6-704-354-01	IC BQ24010ADRCR			
IC9502	6-703-011-01	IC TC7SZ126AFE			
IC9503	6-703-012-01	IC R2061K01-E2			
IC9504	6-706-575-01	IC TPS2113PWR			
		< JACK >			
J4301	1-818-591-11	JACK (SMALL TYPE) (🎧/LINE OUT)			
		< COIL >			
L3001	1-400-797-11	INDUCTOR	100uH		
L3002	1-400-797-11	INDUCTOR	100uH		
L4301	1-400-646-11	INDUCTOR	100uH		
L5001	1-400-776-11	INDUCTOR	220uH		
L9001	1-400-306-11	INDUCTOR	100uH		
* L9002	1-400-581-11	INDUCTOR	220uH		
* L9003	1-400-581-11	INDUCTOR	220uH		
L9004	1-400-810-11	INDUCTOR	4.7uH		
L9005	1-456-274-21	INDUCTOR	10uH		
		< TRANSISTOR >			
Q1001	6-551-056-01	TRANSISTOR	NP0A54700AS0		
Q2001	6-550-378-01	FET	ECH8301-TL-E		
Q9001	8-729-032-62	FET	2SJ347-TE85L		
Q9002	6-551-074-01	TRANSISTOR	NP0A50100AS0		
Q9003	6-550-234-01	TRANSISTOR	UNR32A300LS0		
Q9004	6-551-074-01	TRANSISTOR	NP0A50100AS0		
Q9501	6-551-057-01	TRANSISTOR	NP062A300AS0		
Q9502	6-550-379-01	FET	2SK354700LS0		
Q9503	6-550-234-01	TRANSISTOR	UNR32A300LS0		

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

@ Replacement of IC1003, 1101, 2001, 3001, 7001 and 7002 use in this set requires a special tool.

MAIN

< RESISTOR/FERRITE >

Ref. No.	Part No.	Description			Remark
R1001	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1002	1-218-990-11	SHORT CHIP	0		
R1005	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1006	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1007	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1008	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1009	1-218-990-11	SHORT CHIP	0		
R1011	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1013	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1015	1-218-990-11	SHORT CHIP	0		
R1016	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1017	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1018	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1019	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1021	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1022	1-218-990-11	SHORT CHIP	0		
R1023	1-218-990-11	SHORT CHIP	0		
R1025	1-218-990-11	SHORT CHIP	0		
R1026	1-218-990-11	SHORT CHIP	0		
R1027	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1028	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1029	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1047	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R1102	1-218-990-11	SHORT CHIP	0		
R1103	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1110	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R1111	1-208-944-11	METAL CHIP	240K	0.5%	1/16W
R1201	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1202	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1203	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1204	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1205	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1206	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1207	1-218-989-11	RES-CHIP	1M	5%	1/16W
R2001	1-218-929-11	RES-CHIP	10	5%	1/16W
R2003	1-469-084-21	FERRITE			
R2004	1-218-977-11	RES-CHIP	100K	5%	1/16W
R2005	1-208-905-11	METAL CHIP	5.6K	0.5%	1/16W
R2006	1-218-985-11	RES-CHIP	470K	5%	1/16W
R2007	1-218-985-11	RES-CHIP	470K	5%	1/16W
R2008	1-218-985-11	RES-CHIP	470K	5%	1/16W
R2009	1-218-990-11	SHORT CHIP	0		
R2010	1-218-989-11	RES-CHIP	1M	5%	1/16W
R2011	1-218-989-11	RES-CHIP	1M	5%	1/16W
R2012	1-218-935-11	RES-CHIP	33	5%	1/16W
R2013	1-218-935-11	RES-CHIP	33	5%	1/16W
R2014	1-218-940-11	RES-CHIP	82	5%	1/16W
R2015	1-218-933-11	RES-CHIP	22	5%	1/16W
R2016	1-218-940-11	RES-CHIP	82	5%	1/16W
R2017	1-218-933-11	RES-CHIP	22	5%	1/16W
R2018	1-218-933-11	RES-CHIP	22	5%	1/16W
R2019	1-218-940-11	RES-CHIP	82	5%	1/16W
R2020	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2021	1-218-962-11	RES-CHIP	5.6K	5%	1/16W
R2022	1-218-961-11	RES-CHIP	4.7K	5%	1/16W

Ref. No.	Part No.	Description			Remark
R2023	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2024	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2025	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2026	1-218-935-11	RES-CHIP	33	5%	1/16W
R2027	1-218-935-11	RES-CHIP	33	5%	1/16W
R2028	1-218-935-11	RES-CHIP	33	5%	1/16W
R2029	1-218-935-11	RES-CHIP	33	5%	1/16W
R2030	1-218-935-11	RES-CHIP	33	5%	1/16W
R2031	1-218-935-11	RES-CHIP	33	5%	1/16W
R2032	1-218-935-11	RES-CHIP	33	5%	1/16W
R2033	1-218-935-11	RES-CHIP	33	5%	1/16W
R2034	1-218-935-11	RES-CHIP	33	5%	1/16W
R2035	1-218-935-11	RES-CHIP	33	5%	1/16W
R2036	1-218-935-11	RES-CHIP	33	5%	1/16W
R2037	1-218-935-11	RES-CHIP	33	5%	1/16W
R2038	1-218-935-11	RES-CHIP	33	5%	1/16W
R2039	1-218-935-11	RES-CHIP	33	5%	1/16W
R2040	1-218-935-11	RES-CHIP	33	5%	1/16W
R2041	1-218-935-11	RES-CHIP	33	5%	1/16W
R2042	1-218-935-11	RES-CHIP	33	5%	1/16W
R2043	1-218-935-11	RES-CHIP	33	5%	1/16W
R2044	1-218-935-11	RES-CHIP	33	5%	1/16W
R2045	1-218-973-11	RES-CHIP	47K	5%	1/16W
R2046	1-218-990-11	SHORT CHIP	0		
R3002	1-218-985-11	RES-CHIP	470K	5%	1/16W
R3004	1-218-945-11	RES-CHIP	220	5%	1/16W
R3005	1-218-990-11	SHORT CHIP	0		
R3006	1-218-985-11	RES-CHIP	470K	5%	1/16W
R3010	1-218-985-11	RES-CHIP	470K	5%	1/16W
R3014	1-218-990-11	SHORT CHIP	0		
R3015	1-218-990-11	SHORT CHIP	0		
R3019	1-218-990-11	SHORT CHIP	0		
R3020	1-218-990-11	SHORT CHIP	0		
R3021	1-218-990-11	SHORT CHIP	0		
R3022	1-218-990-11	SHORT CHIP	0		
R3023	1-218-990-11	SHORT CHIP	0		
R3024	1-218-990-11	SHORT CHIP	0		
R3025	1-218-990-11	SHORT CHIP	0		
R4002	1-218-989-11	RES-CHIP	1M	5%	1/16W
R4101	1-218-967-11	RES-CHIP	15K	5%	1/16W
R4102	1-218-966-11	RES-CHIP	12K	5%	1/16W
R4103	1-218-933-11	RES-CHIP	22	5%	1/16W
R4104	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4105	1-218-990-11	SHORT CHIP	0		
R4201	1-218-967-11	RES-CHIP	15K	5%	1/16W
R4202	1-218-966-11	RES-CHIP	12K	5%	1/16W
R4203	1-218-933-11	RES-CHIP	22	5%	1/16W
R4204	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4205	1-218-990-11	SHORT CHIP	0		
R4301	1-218-929-11	RES-CHIP	10	5%	1/16W
R4303	1-218-990-11	SHORT CHIP	0		
R4305	1-242-967-11	RES-CHIP	1	5%	1/16W
R4307	1-218-979-11	RES-CHIP	150K	5%	1/16W
R4308	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4309	1-218-990-11	SHORT CHIP	0		
R4313	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4316	1-218-933-11	RES-CHIP	22	5%	1/16W
R5001	1-208-942-11	METAL CHIP	200K	0.5%	1/16W

Ref. No.	Part No.	Description			Remark
R5002	1-218-978-11	RES-CHIP	120K	5%	1/16W
R5003	1-218-968-11	RES-CHIP	18K	5%	1/16W
R5004	1-218-990-11	SHORT CHIP	0		
R5005	1-218-990-11	SHORT CHIP	0		
R5008	1-208-703-11	METAL CHIP	6.8K	0.5%	1/16W
R5009	1-208-703-11	METAL CHIP	6.8K	0.5%	1/16W
R5010	1-208-695-11	METAL CHIP	3.3K	0.5%	1/16W
R5011	1-208-695-11	METAL CHIP	3.3K	0.5%	1/16W
R5012	1-218-989-11	RES-CHIP	1M	5%	1/16W
R5013	1-218-989-11	RES-CHIP	1M	5%	1/16W
R5014	1-208-687-11	METAL CHIP	1.5K	0.5%	1/16W
R5015	1-208-687-11	METAL CHIP	1.5K	0.5%	1/16W
R5016	1-208-683-11	METAL CHIP	1K	0.5%	1/16W
R5017	1-208-683-11	METAL CHIP	1K	0.5%	1/16W
R5018	1-218-985-11	RES-CHIP	470K	5%	1/16W
R5019	1-208-679-11	METAL CHIP	680	0.5%	1/16W
R5020	1-208-679-11	METAL CHIP	680	0.5%	1/16W
R5021	1-208-699-11	METAL CHIP	4.7K	0.5%	1/16W
R5022	1-208-699-11	METAL CHIP	4.7K	0.5%	1/16W
R5023	1-218-985-11	RES-CHIP	470K	5%	1/16W
R5024	1-218-929-11	RES-CHIP	10	5%	1/16W
R7001	1-218-953-11	RES-CHIP	1K	5%	1/16W
R7002	1-218-977-11	RES-CHIP	100K	5%	1/16W
R7003	1-218-953-11	RES-CHIP	1K	5%	1/16W
R7004	1-218-953-11	RES-CHIP	1K	5%	1/16W
R7005	1-218-990-11	SHORT CHIP	0		
R7006	1-218-985-11	RES-CHIP	470K	5%	1/16W
R7008	1-218-990-11	SHORT CHIP	0		
R7009	1-218-985-11	RES-CHIP	470K	5%	1/16W
R7010	1-218-985-11	RES-CHIP	470K	5%	1/16W
R7011	1-218-933-11	RES-CHIP	22	5%	1/16W
R7012	1-218-933-11	RES-CHIP	22	5%	1/16W
R8001	1-218-985-11	RES-CHIP	470K	5%	1/16W
R8002	1-218-929-11	RES-CHIP	10	5%	1/16W
R8005	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R8006	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R8007	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R8008	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R8009	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R8010	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R9000	1-218-973-11	RES-CHIP	47K	5%	1/16W
R9001	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R9002	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R9003	1-218-989-11	RES-CHIP	1M	5%	1/16W
R9004	1-218-989-11	RES-CHIP	1M	5%	1/16W
R9005	1-218-941-11	RES-CHIP	100	5%	1/16W
R9006	1-218-941-11	RES-CHIP	100	5%	1/16W
R9007	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R9008	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9009	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9010	1-218-967-11	RES-CHIP	15K	5%	1/16W
R9011	1-208-947-11	METAL CHIP	330K	0.5%	1/16W
R9012	1-244-161-11	RES-CHIP	2.2	5%	1/16W
R9013	1-218-989-11	RES-CHIP	1M	5%	1/16W
R9014	1-208-939-11	METAL CHIP	150K	0.5%	1/16W
R9015	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R9016	1-218-977-11	RES-CHIP	100K	5%	1/16W
R9018	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9019	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R9020	1-218-970-11	RES-CHIP	27K	5%	1/16W
R9021	1-208-894-11	METAL CHIP	2K	0.5%	1/16W
R9022	1-208-720-11	METAL CHIP	36K	0.5%	1/16W
R9023	1-208-720-11	METAL CHIP	36K	0.5%	1/16W
R9024	1-208-720-11	METAL CHIP	36K	0.5%	1/16W
R9027	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9028	1-202-974-11	RES-CHIP	3.3M	5%	1/16W
R9029	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R9030	1-208-939-11	METAL CHIP	150K	0.5%	1/16W
R9031	1-218-990-11	SHORT CHIP	0		
R9032	1-208-942-11	METAL CHIP	200K	0.5%	1/16W
R9033	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R9034	1-208-713-11	METAL CHIP	18K	0.5%	1/16W
R9035	1-220-804-11	RES-CHIP	2.2M	5%	1/16W
R9036	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R9037	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9038	1-218-965-11	RES-CHIP	10K	5%	1/16W
R9040	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9041	1-218-989-11	RES-CHIP	1M	5%	1/16W
R9501	1-208-697-11	METAL CHIP	3.9K	0.5%	1/16W
R9502	1-208-703-11	METAL CHIP	6.8K	0.5%	1/16W
R9503	1-208-699-11	METAL CHIP	4.7K	0.5%	1/16W
R9504	1-218-977-11	RES-CHIP	100K	5%	1/16W
R9505	1-208-894-11	METAL CHIP	2K	0.5%	1/16W
R9506	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9507	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9509	1-218-949-11	RES-CHIP	470	5%	1/16W
R9511	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9512	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9513	1-218-985-11	RES-CHIP	470K	5%	1/16W
R9514	1-218-990-11	SHORT CHIP	0		

< SWITCH >

S5009	1-786-030-21	SWITCH, SLIDE (HOLD)
S9501	1-786-030-21	SWITCH, SLIDE (BUILT-IN BATTERY)

< THERMISTOR >

TH9501	1-804-949-11	THERMISTOR, NTC (SMD)

< VARISTOR/DIODE >

VDR1001	1-804-209-21	VARISTOR (SMD)	(1005)
VDR1002	1-804-209-21	VARISTOR (SMD)	(1005)
VDR2001	1-804-209-21	VARISTOR (SMD)	(1005)
VDR2002	1-804-209-21	VARISTOR (SMD)	(1005)
VDR3001	1-804-209-21	VARISTOR (SMD)	(1005)
VDR3002	1-804-209-21	VARISTOR (SMD)	(1005)
VDR3003	1-804-209-21	VARISTOR (SMD)	(1005)
VDR3004	1-804-209-21	VARISTOR (SMD)	(1005)
VDR7001	1-804-209-21	VARISTOR (SMD)	(1005)
VDR7002	1-804-209-21	VARISTOR (SMD)	(1005)
VDR9501	1-805-216-21	VARISTOR, CHIP	
VDR9502	1-805-216-21	VARISTOR, CHIP	
VDR9503	6-500-701-01	DIODE PGB0010603NR	
VDR9504	6-500-701-01	DIODE PGB0010603NR	
VDR9506	1-805-216-21	VARISTOR, CHIP	

MAIN

Ref. No.	Part No.	Description	Remark
VDR9507	1-805-216-21	VARISTOR, CHIP	
		< VIBRATOR >	
X1002	1-795-891-21	VIBRATOR, CERAMIC (22.5792MHz)	
X2001	1-813-362-11	VIBRATOR, CRYSTAL (12MHz)	
X9501	1-795-602-11	VIBRATOR, CRYSTAL (32.768kHz)	

MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2004.07	New
1.1	2004.09	Addition of Canadian model Printed Wiring Boards Modification (Suffix-12) Correction of TEST MODE (ECN-ECA41257/ECA45073/SPM-04099)